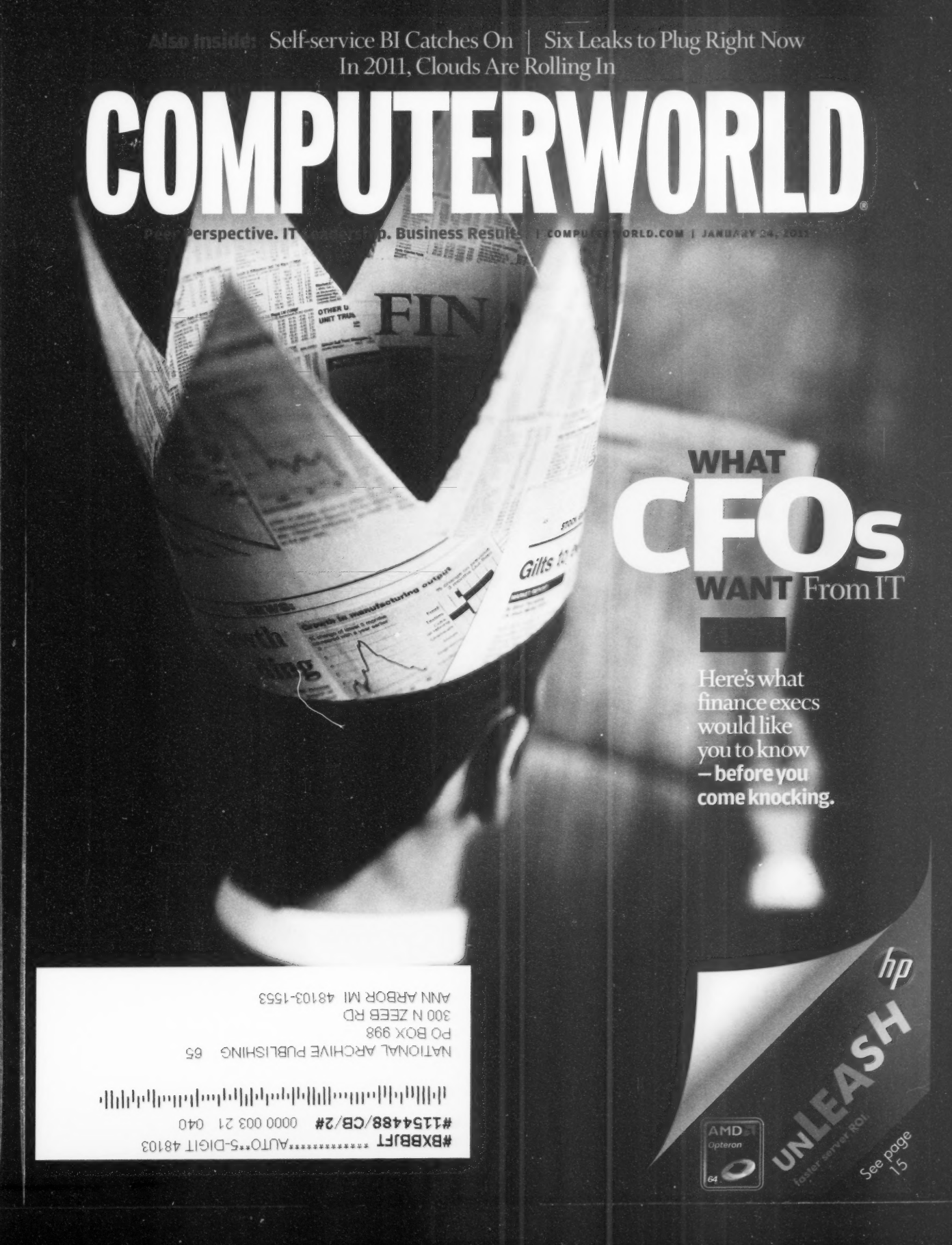
Also Inside: Self-service BI Catches On | Six Leaks to Plug Right Now
In 2011, Clouds Are Rolling In

COMPUTERWORLD

Perspective. IT ... Business Results | COMPUTERWORLD.COM | JANUARY 24, 2011



WHAT CFOs WANT From IT

Here's what finance execs would like you to know **– before you come knocking.**

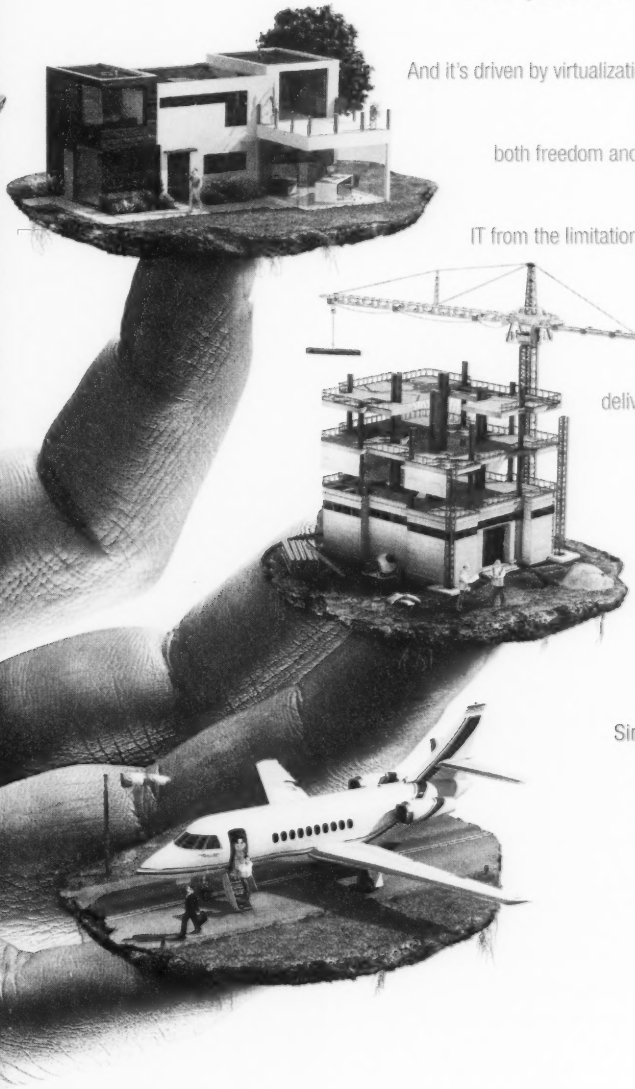
hp
UNLEASH
foster server ROI.
AMD Opteron 64
See page 15

#BXBBJFT ********AUTO**5-DIGIT 48103
#1154488/CB/2# 0000 003 21 040
NATIONAL ARCHIVE PUBLISHING 65
PO BOX 998
300 N ZEEB RD
ANN ARBOR MI 48103-1553

Free your workforce. Control what matters.

VIRTUAL C

OMPUTING



Work anywhere. On any device. We call that virtual computing.

And it's driven by virtualization technologies that give you both freedom and control. Virtual computing frees users and IT from the limitations of the traditional computing model.

Give IT control over what truly matters–delivering desktops, applications and data.

Securely. Say yes to users who need to work whenever, on any device they choose.

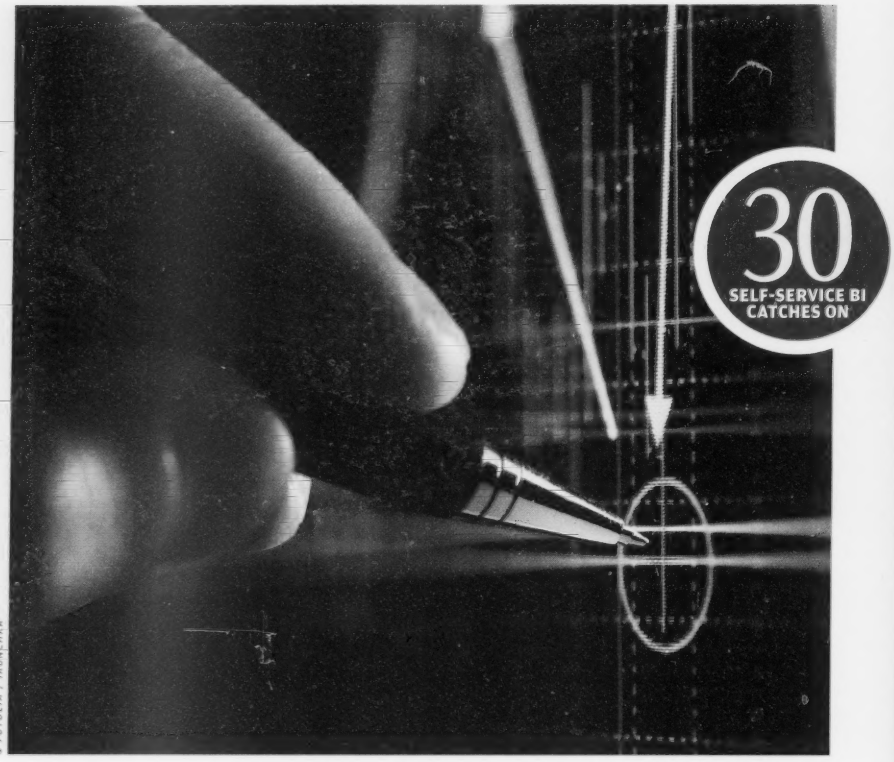
Experience the power of virtual computing.

Simplicity is power. Citrix.

CITRIX®

Citrix.com/SimplicityIsPower

© 2011 Citrix Systems, Inc. All rights reserved. Simplicity is Power and its stylized treatment are trademarks of Citrix Systems, Inc.



© FOTOLIA / IRONCHAK

COVER STORY

What CFOs Want From IT

18 In a down economy, IT isn't going anywhere without Finance. Here's what CFOs would like you to know before you ask for project funding.

Six Leaks to Plug Right Now

26 Even companies with strong security systems and policies could be vulnerable to threats like Bluetooth sniper rifles and social network spoofs.

Self-service BI Catches On

30 The goal is to help business users make smart decisions with complex data – and less IT involvement.

HEADS UP | **4** Are **enterprise app stores** a good idea? | **Intrusion-detection tools** show some improvement. | **6 ERP projects** are put on hold for 2011. | **BI tools** can help evaluate green programs.

NEWS ANALYSIS
8 Congress is set to debate **key tech issues.** | **10** Executive exits could be bad news for **Microsoft techies.**

OPINIONS | **14 Paul Glen** has advice on what to do when a new boss arrives. | **34 Steven J. Vaughan-Nichols** thinks it's time to forget about passwords. | **40 Scot Finnie** looks beyond the hype and explains why cloud computing could be big this year.

DEPARTMENTS
11 The Grill: Travel agency CIO Kathryn Akerman. | **33 Security Manager's Journal** | **36 Career Watch** | **38 Shark Tank**

FOR BREAKING NEWS, VISIT COMPUTERWORLD.COM

COMPUTERWORLD

P.O. Box 9171
492 Old Connecticut Path
Framingham, MA 01701
508-879-0700
Computerworld.com

» EDITORIAL

Editor in Chief
Scot Finnie

Executive Editors
Mitch Betts, Julia King (events)

Managing Editors
Michele Lee DeFilippo (production), Sharon Machlis (online), Ken Mingis (news)

Director of Blogs
Joyce Carpenter

Art Director
April Montgomery

Technologies Editor
Johanna Ambrosio

Features Editors
Valerie Potter, Ellen Fanning (special reports), Barbara Krasnoff (reviews)

News Editors
Mike Bucken, Marian Prokop

Senior Editor
Mike Barton

National Correspondents
Julia King, Robert L. Mitchell

Reporters
Sharon Gaudin, Matt Hamblen, Gregg Keizer, Lucas Mearian, Patrick Thibodeau, Jaikumar Vijayan

Assistant Managing Editor
Bob Rawson (production)

Editorial Project Manager
Mari Keefe

Associate Online Editor
Ken Gagné

Office Manager
Linda Gorgone

Contributing Editors
Jamie Eckle, Preston Gralla, Tracy Mayor

» CONTACTS

Phone numbers, e-mail addresses and reporters' beats are available online at *Computerworld.com* (see Contacts link at the bottom of the home page).

Letters to the Editor
Send to letters@computerworld.com. Include an address and phone number for immediate verification. Letters will be edited for brevity and clarity.

News tips
newstips@computerworld.com

Subscriptions and back issues
(888) 559-7327, cw@omeda.com

Reprints/permissions
The YGS Group, 800-501-9571, ext. 180, computerworld@theygsgroup.com

Smarter technology for a Smarter Planet:
What 99.9% system uptime means to a kilo of gold.
It means that the futures contract for that gold can trade instantly and more securely. The Dubai Gold & Commodities Exchange (DGCX) has maintained their complex network of worldwide members for four years without a single security breach due to malware, and without any unplanned downtime. The DGCX worked with IBM Security Solutions to help implement an intrusion prevention system that builds security into every aspect of their online trading services and proactively adapts to ever-evolving threats. A smarter business is built on smarter software, systems and services.
Let's build a smarter planet. ibm.com/exchange
IBM
A data visualization of the settlement prices for gold, silver and other commodities from March 1 to September 1, 2010.
IBM, the IBM logo, ibm.com, Smarter Planet and the planet icon are trademarks of International Business Machines Corp, registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml. © International Business Machines Corporation 2010

Fresh Insights
New Trends
Great Ideas

Heads Up

© FOTOLIA / MATTY SYMONS

APPLICATIONS

Enterprise App Stores: A Good Idea?

SHOULD EMPLOYEES be able to download enterprise applications just like smartphone users download consumer software from online app stores?

That's a question some IT shops and software vendors are pondering, according to a Jan. 10 blog post by Gartner Inc. analyst Dennis Gaughan.

He said that an enterprise app store could help IT deploy and maintain corporate apps more easily while tracking downloads and usage trends. "It's a very compelling idea, one that software vendors and service providers are thinking about to help sell more software and/or services," he added.

"The idea has legs," Gaughan concluded, but he cautioned that there are big hurdles to overcome because of the differences between heavy-duty enterprise apps and inexpensive smartphone apps:

- Unlike Apple Inc.'s popular App Store, where one company controls everything except code development, an enterprise app store would have to deal with a wide variety of technologies and vendors. "It would also require a level of cooperation between vendors that, to say the least, has been difficult to achieve," Gaughan said.
- Smartphone apps work independently, whereas enterprise apps (like order management and logistics) need to work together and share data.
- An enterprise app store would need a standardized approach to provisioning, billing and maintenance for all of the store's software, while IT would have to ensure compliance with licensing terms.

– Mitch Betts

GET BREAKING NEWS AT COMPUTERWORLD.COM

SECURITY MONITOR

Intrusion Tools Getting Better But Need Tuning

The latest tests of intrusion-protection systems, which are used to defend corporate networks from external threats, show that they're improving but are far from perfect.

NSS Labs Inc. tested 13 IPS products from 11 vendors in the fourth quarter of 2010. At default settings for protecting against malware exploits, the systems caught 62% of the attacks on average, up from 45% in 2009.

In their default modes, McAfee Inc.'s M-8000 and Cisco Systems Inc.'s IPS 4260 Sensor were the best at blocking attacks against desktop applications, with effectiveness rates of 94.5% and 91.8%, respectively, in NSS's tests.

When engineers from the companies were allowed to "tune" their products, or add more rules designed to catch specific types of attacks, the 13 IPS products had substantially higher success rates.

Some products had effectiveness rates as low as 31% at the default settings. "There's a big difference between the default and the tuned for many vendors," said Rick Moy, president of NSS Labs.

The 11 vendors voluntarily submitted their products for the free testing, but nine other vendors declined, said Moy. "The vendors who had confidence in their products wanted to participate," he said.

– JEREMY KIRK, IDG NEWS SERVICE

Smarter technology for a Smarter Planet:

What database integration means to this blood sample.

It means doctors in Ethiopia will be able to instantly compare this blood sample to over 41,000 HIV treatment histories to help their patients receive the best treatment regimen possible. The EuResist Network is helping doctors predict patient response to various HIV treatments with over 78% accuracy—outperforming 9 out of 10 human experts in a recent study. The tool is built on an IBM analytics solution that integrates a variety of disparate databases onto a flexible IBM DB2® platform to process complex metadata more effectively than anything else on the market. A smarter organization is built on smarter software, systems and services.

Let's build a smarter planet. ibm.com/hospital

IBM

A data visualization of 41,000 HIV case histories.

The EuResist Network is a nonprofit partnership composed of Karolinska Institutet (Stockholm, Sweden), Max Planck Institute for Informatics (Saarbrücken, Germany), University of Saarland (Saarbrücken, Germany), Roma tre (Rome, Italy) and University of Cologne (Germany). The EuResist project has been cofunded by the European Commission. IBM, the IBM logo, Amazon, DB2, Smarter Planet and the planet icon are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml. © International Business Machines Corporation 2010

BETWEEN THE LINES
By John Klossner

ENTERPRISE APPLICATIONS

Users Hit 'Pause' on ERP Investments

THE NUMBER of companies planning to invest in their ERP systems will drop slightly this year, according to a Forrester Research Inc. report, even as IT spending overall is expected to rise.

One quarter of roughly 900 companies surveyed by Forrester plan to upgrade, expand or implement an ERP system, down from 29% in a study last year, according to the report by analyst Paul Hamerman.

Overall, 72% are "in a holding pattern for 2011, with plans to stand pat or no specific plans to invest in ERP," Hamerman wrote.

Roughly half of ERP customers are running product releases that are two versions behind the current one, according to the report. But expiring support windows and related price increases will spur more upgrades over time.

Still, overall the ERP market has rebounded well from its "disastrous" 2009, according to Hamerman's report.

ERP vendors will continue to roll out new features and functionality, although many customers may not adopt them for some time. Those features include cloud-based deployment options, mobile applications and embedded business process modeling, Hamerman said.

One of the most significant ERP product launches, Oracle Corp.'s Fusion Applications, is expected to happen this quarter.

Perhaps with one eye on the economy, Oracle has set modest public expectations for user adoption of the long-delayed software, which is supposed to combine the best attributes of the company's various ERP lines into a next-generation suite.

Fusion Applications will be available in modules to be deployed either on-premises or in the cloud. Oracle said the modules can be rolled out at the customer's own pace.

Also this year, SAP AG is expected to release of a series of software-as-a-service applications that act as extensions of its on-premises ERP systems, as well as mobile software obtained from its acquisition of Sybase.

– Chris Kanaracus, IDG News Service

Micro Burst

SMS: 'TREMENDOUS SUCCESS'

ABI Research estimates that more than

7 trillion

SMS text messages will be sent worldwide this year.

SOURCE: ABI RESEARCH, LONDON, DECEMBER 2010

THINK TANK

BI Tools Can Help Evaluate Green Programs

We usually think of "green IT" as making data centers more energy efficient. But there's another form of green IT emerging: the use of business intelligence systems to analyze data about a company's progress in meeting its environmental goals.

Deloitte Consulting LLP called it "sustainability analytics" in a report released late last year.

"Through analytics, leaders can obtain the fact-based guidance they need to make informed decisions about how their organizations approach sustainability and climate change issues," the report said.

For example, managers could analyze data to determine which of their sustainability initiatives are actually achieving their intended goals, and to allocate resources to efforts that have the greatest likelihood of satisfactory returns, Deloitte said.

The report cited one unnamed company that tracks metrics at 80 global facilities and was able to spot "facilities that consumed conspicuously large amounts of energy, as well as those where the cost of travel per employee was much higher than average." The company then took actions that saved money and reduced its carbon footprint.

– MITCH BETTS

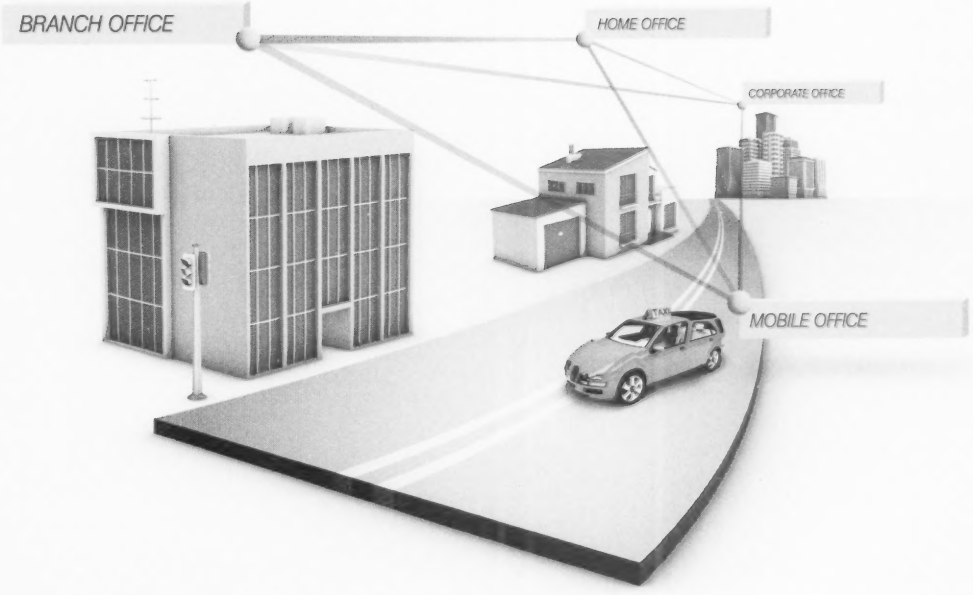
Rely on one network right where your team needs it.

Sprint Global MPLS gives you the upper hand by converging voice, video and data on a single IP-based network. Sprint Global MPLS also gives you best-in-class network performance, with industry-leading SLAs and Class of Service at no additional charge to get you started.

1-866-653-1056 sprint.com/convergence

Sprint

The Now Network™



Winner of the Frost & Sullivan North American Product Leadership Award
for MPLS Service Level Agreements for Business Customers–2010

©2010 Sprint. Sprint and the logo are trademarks of Sprint. Other marks are the property of their respective owners.

Congress Set to Debate Tech Issues

Analysts expect a divided Congress to come together to tackle targeted cybersecurity, skilled immigration and other tech-related bills this year. By Grant Gross

THOUGH THE NEW CONGRESS comes in with plans to focus on the budget and social issues, analysts expect that legislators will also take on key technology concerns, albeit with scaled-back legislation.

The session of Congress that started this month finds Democrats in control of the Senate and Republicans holding a majority in the House of Representatives — a situation that is expected to make for a contentious period leading up to next year's elections. But analysts say that some tech topics haven't faced partisan debate in recent years and thus agreements could be reached on select pieces of legislation.

Congress should have a window of six to eight months to tackle some key tech issues before lawmakers' attention turns to the 2012 election cycle, said Dean Garfield, president and CEO of the Washington-based Information Technology Industry Council, a technology trade group.

"I think there's a real opportunity to get some meaningful [technology] legislation passed," he said, though he acknowledged that the focus will likely be on bills targeting narrow concerns rather than wide-ranging issues. "I think the chance of having a comprehensive anything in 2011 with this Congress is slim to none," he added.

Targeted, scaled-back tech-focused bills could have "the dual benefit of being nonpartisan and fitting within the first priority of Democrats, Republicans, House and Senate and the [Obama] administration, which is get the economy back on track and create jobs," Garfield said.

For example, while comprehensive cybersecurity legislation is unlikely to pass through Congress, smaller pieces, such as a scaled-down data-breach notification bill or funding for cybersecurity research, have a chance at becoming law in this session, said Charlie Greenwald, vice president of communications at TechAmerica, a Washington-based technology trade group.

Technology policy experts also expect that Congressional Republicans will push to repeal the December Federal Communications Commission vote to approve Net neutrality rules that prohibit broadband providers from blocking customer access to legal Web content, Rep. Marsha Blackburn (R-Tenn.) has already introduced legislation that would strike down the new Net neutrality rules.

The push to repeal the ruling, which was criticized by both business and consumer groups, is likely to stall either in the Senate or the White House, experts said.

Other tech-related agenda items that could move forward this year include a revamp of the 25-year-old Electronic Communications Privacy Act, reform of skilled-immigration programs, corporate tax changes that would affect many technology firms, measures affecting wireless spectrum for public safety agencies, and a free-trade agreement with South Korea.

Meanwhile, experts anticipate that any bills looking to provide consumers with more control over tracking by online advertising networks and Web sites are probably doomed to fail in a Republican-controlled House of Representatives.

Last year, members of the House Energy and Commerce Committee introduced legislation that would have allowed consumers to opt out of Web tracking efforts, but Republicans sided with several advertising and business groups that opposed the bill. Thus, chances of similar legislation passing in 2011 are small. ◆

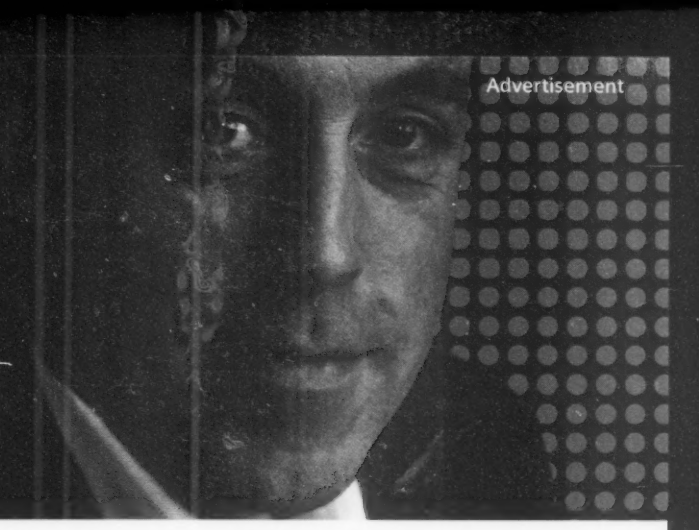
Gross *is a reporter for the IDG News Service.*

"I think there's a real opportunity to get some **meaningful [technology] legislation** passed.
DEAN GARFIELD, PRESIDENT AND CEO, INFORMATION TECHNOLOGY INDUSTRY COUNCIL

© FOTOLIA / RABBIT75_FOT

Advertisement

There's no Technology like Business Technology.



Punch cards, floppy disk and data processing. Will 'information technology' soon be another of these outdated terms? It is increasingly clear that we need to become acquainted with a fresh term: Business Technology.

Innovative thinking and technology have already led to a step change in the way business is done in the 21st century. Procurement has evolved into Supply Chain Management, sales teams are now supported by Customer Relationship Management and sales campaigns are now supplemented by Social Media Marketing. Common to these developments are the powerful tools required to assist management and employees in order to efficiently control global work processes.

Regardless of the type of enterprise or government body, organizations that fail to employ the very latest technologies and services will not be able to compete in the longer term. A media company that isn't familiar with the latest iPad and Android applications, an industry player that doesn't have a firm grip on its manufacturing chain, or a utility company that isn't up to date on the topic of smart grids – will find it difficult to both operate cost effectively and continue to grow their customer bases.

It has become extremely difficult to gain a general understanding of the huge range of technology and services available, let alone the detailed information regarding these solutions. Despite trade journals and fairs, very few managers can boast that they still have a complete and up-to-date picture, even within their own field of expertise.

The people who are thriving on the challenge have two key areas of competence. First, deep industry know-how about the internal processes and needs of customers, partners and suppliers. In short: Business. Second, the ability to understand and shape the technological landscape, the interaction of the components and the transformation to the state-of-the-art technologies and trends, such as cloud computing and app-based business models.
In short: Technology.

The reality is there are thousands of individuals drawing on a unique understanding of a wide range of industries and practicing Business Technology day in, day out.

Siemens IT Solutions and Services, one of the world's largest outsourcers and providers of industry-specific solutions, has recognized the growing importance of Business Technology and is backing it as the future of its industry. The team at Siemens are such passionate exponents of Business Technology that they call themselves the Business Technologists.

Christian Oecking, Chairman of the Managing Board of Siemens IT Solutions and Services, describes his people and why the company has made such a defining statement: "Our people can talk on equal terms with IT specialists as well as business leaders and process managers. They can look at businesses from both an economic and a technological perspective.

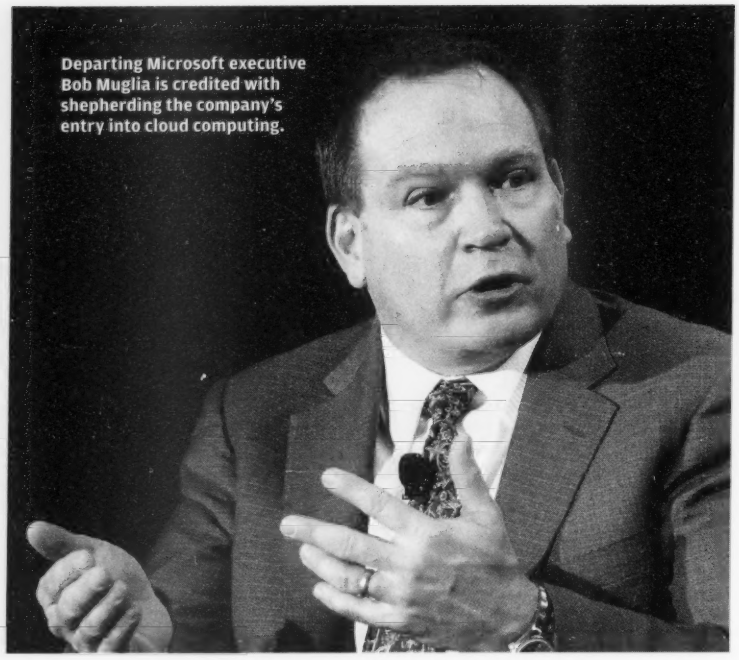
They supply technological answers to industry-specific questions and they implement comprehensive and concrete technological solutions from a strong partner ecosystem that help our customers deliver on their business strategy. The customer landscape demands Business Technology and we are ready to deliver it like no other company. That's why we are the Business Technologists."

Contact:

Siemens IT Solutions and Services, Inc
101 Merritt 7 06851
Norwalk, CT
Tel. 203-642-2300

E-mail:
corporate.communications.us.it-solutions@siemens.com

Further information: www.usa.siemens.com/it-solutions



Departing Microsoft executive Bob Muglia is credited with shepherding the company's entry into cloud computing.

Exec Exits Bad News For Microsoft Techies

Microsoft watchers say the loss of Muglia and others could prove to be a burden to the company's technical staff. By Gregg Keizer and Joab Jackson

THE DEPARTURES of Bob Muglia and other executives from Microsoft Corp. could be a troubling sign for the software vendor, because many of those involved in the exodus were held in high esteem by the company's technical talent, industry observers say.

Muglia, a 23-year Microsoft veteran who's slated to step down as president of the company's lucrative Server and Tools Business (STB) this summer, will be the latest in a wave of top executives to leave the software giant in recent months.

In just over a year, Microsoft has lost Chief Software Architect Ray Ozzie; Stephen Elop, the Office group's president; Robbie Bach, president of the entertainment division; Chief Financial Officer Chris Liddell; and now Muglia.

"What worries me is the loss of these long-term people — people who had the respect of the technical community inside Microsoft," said Rob Helm, an analyst at Directions on Microsoft, a Kirkland, Wash.-based research firm. "That was especially true of Muglia. His departure will be a real burden to that part of Microsoft." Engineering groups "felt [Muglia] was someone who heard them," Helm added.

Don Dodge, a former Microsoft evangelist who was laid off in 2009 and then joined Google as a developer advocate, said in his personal blog that "losing Muglia, Robbie Bach, Steve Elop, Ray Ozzie, Chris Liddell, Kevin Johnson, Jeff Raikes and other senior execs is devastating."

Johnson was president of Microsoft's platform and services group, and Raikes once led the Office unit; both left in 2008.

In a memo to Microsoft employees announcing the latest departure earlier this month, CEO Steve Ballmer touted Muglia's considerable accomplishments in building STB into a $15 billion-a-year operation.

However, Ballmer also hinted that changing the group's leadership might be the best move for the future of the business, which is responsible for Microsoft's development and infrastructure products, including Microsoft Windows Server, SQL Server, Visual Studio and System Center.

"Bob Muglia and I have been talking about the overall business and what is needed to accelerate our growth," Ballmer wrote. "In this context, I have decided that now is the time to put new leadership in place for STB. This is simply recognition that all businesses go through cycles and need new and different talent to manage through those cycles."

Muglia has also been credited with shepherding Microsoft's entry into cloud computing by guiding the rollout of its Azure platform.

Helm suggested in an interview that Microsoft might look outside the company to replace Muglia, though he couldn't identify any potential replacements.

Muglia's departure "is a critical one, but I couldn't point at any one replacement," said Helm. "There are plenty of other computing companies that work in the same space and are headed toward the cloud. [They] have executives who might work out." ◆

Jackson *is a reporter for the IDG News Service.*

What worries me is the loss of these long-term people – people who had the respect of the technical community inside Microsoft. – BOB HELM, ANALYST, DIRECTIONS ON MICROSOFT

PHOTO COURTESY OF MICROSOFT

THE Grill

Kathryn Akerman

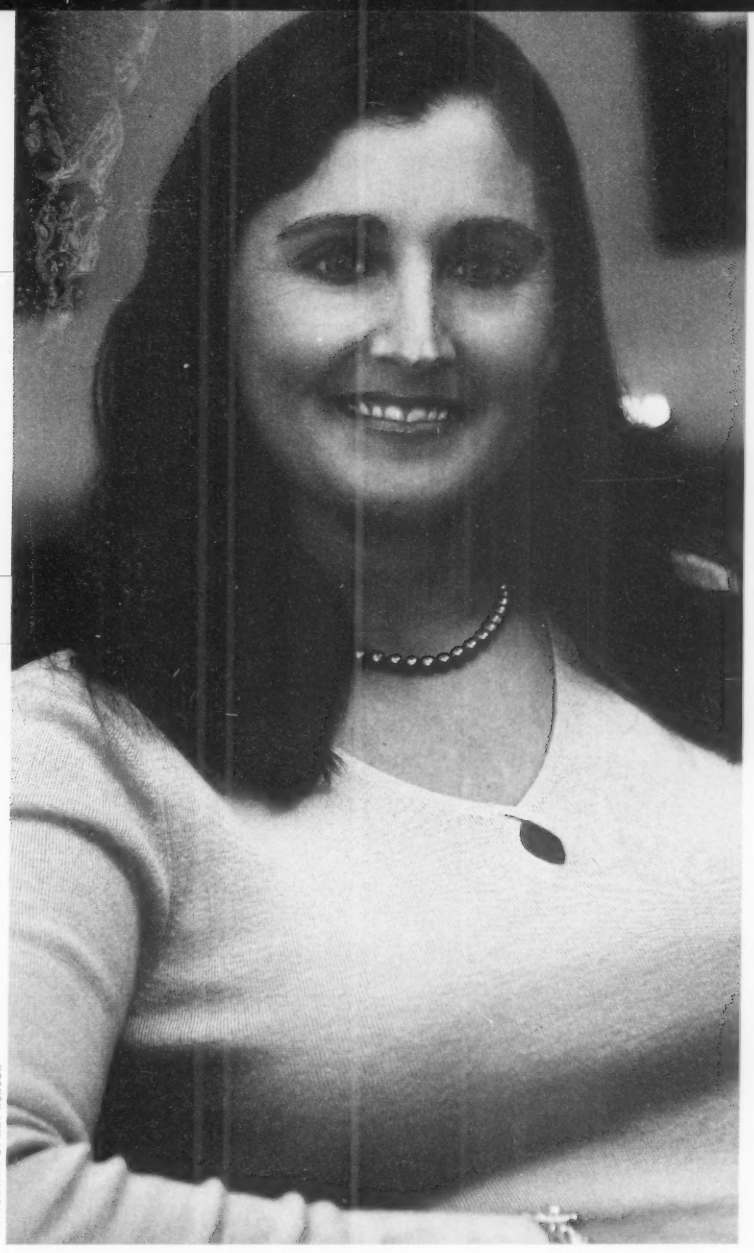
This travel agency CIO uses technology to give customers the personal touch.

Do you take along any IT gadgets when you travel? I never leave home without my iPhone.

What's the most interesting place you've been? Costa Rica. My husband and I honeymooned there. Interesting culture, great country, and fascinating people.

What's your dream destination? Sailing along the coast of Croatia is on the top of my list.

What do you do in your spare time? My biggest passion right now is stand-up paddling. And raising my 4-year-old and traveling as much as we can.



PHOTOGRAPHY BY ART HENSON

THE INTERNET *has changed how people plan their travel needs and book reservations, but that doesn't mean they are completely sold on using technology to do all the work on their own. A 2010 study by Forrester Research Inc. found that 28% of U.S. leisure travelers who booked their trips online would be interested in going to a good traditional travel agent. That statistic doesn't surprise Kathryn Akerman, CIO and part owner of Hurley Travel Experts in Portland, Maine. A 24-year veteran of the industry who worked as a travel agent before moving into IT, Akerman says technology can help the travel planning process, but it can't replace human experience.*

Are you seeing customers return to travel agencies after using online booking sites? We've had clients who went out, tried to do it themselves and came back to us because they realize that travel booking is complicated and their time is a valuable asset. They're looking to us to put those pieces together for them rather than going to different sites

The Hurley Travel Experts executive team: Kathryn Akerman, Chris Evans, Pamela Hurley-Moser and Aileen Cahill.

> **One of our biggest struggles is the way we book travel.** There are these antique legacy systems. They require a lot of technology integration.

to put together their own itinerary. If they come to us, it's one e-mail for them and then we put together the options they need.

What are the most important technologies you provide to your employees? We just made a huge investment in new computers for all our agents. We took advantage of a dual screen for our corporate agents, which allows them to work so much more efficiently — to have an e-mail on one side and booking travel on the other. And the midoffice quality-control system is hugely important for us. It has made our agents much more efficient, so they can focus on customer service. Our agents can work with the customers rather than deal with those formatting steps that a computer can do for them. So once we finalize [travel plans] with the customer, we can push that reservation through to the technology and take care of those redundant steps, issuing the ticket and the quality control — making sure the seats are correct, [checking] the date continuity, e-mailing the customer with confirmation.

As an industry insider and CIO, how do you characterize how technology changed the travel industry? It allows the customers to be so much better informed when they come to us. But one of our biggest struggles is the way we book travel. There are these antique legacy systems that the airlines created long ago that were purchased by other entities. They require a lot of technology integration.

How do you use technology to allow your company to better compete with online travel booking sites? We do offer faster and more complex booking interfaces than customers typically see on those online sites. But we also have that personal service that helps our clients save time and money. We're also helping corporations to streamline their expenses [and improve] visibility. These businesspeople want to book online, but the CFO wants to know where they're spending money. So by giving them that online tool with those discounts, they have that visibility.

Your Web site talks about travel being a people business. How do you make sure agents have the capabilities they need but keep the technology from getting in the way of that personal touch? We really make such a concerted effort to get the booking done behind the scenes. We're focused on the fact that you're coming to us because of our hands-on experience. We want people to know we have up-to-date technology and an up-to-date Web site, but I don't know if technology will be the driving factor in why they come to us. It's still our people and the experience they have.

I understand you're updating your Web site. It's a full rebuild. We had what was really just an online brochure. But we want people to go into our site and have a feel for who we are. And with today's different generations — baby boomers to Gen Y — I think they're all reached so differently now. If it's the baby boomer who still wants to have the brochure and see that person's face, that's there, too.

So, what are the priorities as you rebuild? To have up-to-date information accessible at all times. So whether it's how to reach an agent [or] to be able to do a little bit of research — to know that an agent who is traveling to Africa is blogging, and that's where you're planning on going next year, and you can follow her and see how it's going; to open up a video of a trip that an agent just took to Greece and get a feel for how the hotel was from her perspective — it's still that human element, but adding technology to have that information at all times.

What technologies do your agency's clients want you to provide for them? Most clients just want to have access to us. They just want to know we're there. So it's providing phone service for emergencies, so when they're stuck at an airport, they have someone to call. On a CFO level, they want to see the reports. They want to have the travel-spend visibility and an online reporting tool to access the data we've pushed out. It's using voice over IP, so our agents can answer at home but have the phone ring as seamlessly as if the agent were in the office.

What remains your greatest challenge right now as CIO? To keep up with technology but not break the bank providing those technologies, and yet still allow us to retain that human element.

— *Interview by* Computerworld *contributing writer* **Mary K. Pratt** *(marykpratt@verizon.net)*

A work of art in secure computing.

Building a better cloud takes a revolutionary approach to virtualization that goes far beyond conventional solutions. With a resilient infrastructure and robust security, SunGard provides maximum protection and a fully managed solution that virtually eliminates the risk of failure. Navigate the cloud with confidence as it dynamically scales to meet your needs. With leading-edge technology and a staff of accomplished professionals, SunGard can help make your next cloud computing project a work of art.

Download the white paper "Building a Better Cloud" at: sungardas.com/cloud11

© 2010 SunGard. SunGard and the SunGard logo are trademarks or registered trademarks of SunGard Data Systems Inc. or its subsidiaries in the U.S. and other countries. All other trade names are trademarks or registered trademarks of their respective holders.

SUNGARD AVAILABILITY SERVICES

OPINION

PAUL GLEN

What to Do When You Get a New Boss

THERE ARE FEW WORK EXPERIENCES as unsettling as the arrival of a new boss. I'm not talking about moving into a new department or job and getting a new supervisor in the process. That can be fun, because you're excited about the new assignment or promotion.

I'm talking about when your boss gets replaced. In that case, there's rarely a sense of adventure. Most people find a change above them to be unsettling, prompting them to ask themselves things like, "Will I get fired when the new boss brings in his favorite people from his past position?" "Will my contributions be valued as much as before?" "Why didn't I get the job? Am I not respected here?"

These issues are freighted with emotion, and that can make it difficult to get off on the right foot with the new supervisor. To give yourself the best chance of establishing a productive relationship, you'll need to do a little homework. Take the focus off yourself and do your best to understand the new boss's situation. Recognize that your emotions are not your new boss's primary concern. She has the facts of the transition to deal with, along with her own emotions.

Here are some steps to take in preparation for that first big meeting.

Start by figuring out what your new boss's mandate might be. You can probably make a pretty good guess by considering the state of your group and taking stock of the circumstances under which your old boss left. Was his departure voluntary or involuntary? Was he fired, promoted or subjected to a life change, or did he choose to move to another organization? Was he loved or despised by subordinates, peers and supervisors? The challenges faced by the new boss will be quite different depending on whether she is succeeding a beloved patriarch who left everything running smoothly or a despised despot who left a pile of bodies behind. You should be able to put all of this together well enough to make a list of the top few things that you think your new boss has been tasked to accomplish.

You're going to use those suppositions to create a second list, but first I recommend a little exercise aimed at getting your emotions in hand. This involves writing two other lists. These lists aren't for anyone's eyes but yours, so don't hold anything back. The title of the first should be "Things the new boss could do that would exacerbate all of our current problems." The second should be "Things the new boss could do that would undermine what's working really well now." After you've vented, go over these two lists and think about the genuine issues that have given rise to the items you have put down.

Once you have studied these two lists enough to separate emotion from reason, write down the things that you feel the new boss needs to understand about the current work of the organization, how it does or doesn't support her presumed mandate, your role in that work, the culture of the organization and the individuals involved. Run through the list and make sure you really know what's important about each point.

In your first meeting with the new boss, you need to restrict yourself to sharing only the category titles and general themes you have come up with. You don't want to overwhelm her with details at this point.

The goal of your first meeting with your new boss is to establish a working relationship that will earn you the right to share the details later and have your input be respected. ◆

Recognize that your emotions are not your new boss's primary concern. She has the facts of the transition to deal with.

Paul Glen is a consultant who helps technical organizations improve productivity through leadership, and the author of the award-winning book *Leading Geeks* (Jossey-Bass, 2003). You can contact him at info@paulglen.com.

AMD Opteron 64

UNLEASH

faster server ROI.

With budgets flat and workloads exploding, it's time to unleash the innovation and cost savings locked up within your aging server infrastructure with next generation HP ProLiant servers powered by 8- and 12-core AMD Opteron™ 6100 Series processors. Upgrade now and experience:

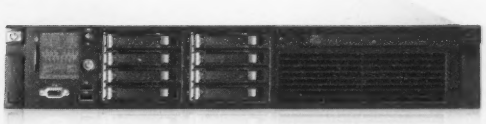
- 23:1 server consolidation ratio[1]
- 96% or more savings on energy and cooling[1]
- $48,380 in total savings for every 100 users[2]

Transform your server environment while building the foundation for the HP Converged Infrastructure. All for an investment that pays for itself in as little as 2 months.[1] Unleash faster server ROI now.

Outcomes that matter.

See the proof. Access our ROI calculator and register to download your podcasts at **hp.com/servers/unleash5**

20 YEARS
OF x86 SERVER INNOVATION



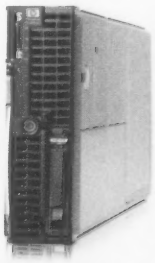
HP ProLiant DL385 G7 Server

- AMD Opteron™ Processor Model 6134
- 4 GB memory, up to 256 GB max
- Up to eight (8) small form factor high-performance SAS hard drives with standard cage. Or up to 16 SFF or 6 LFF hard drives with optional drive cages.
- Integrated Lights-Out 3 (iLO 3) providing industry-leading management and 8X faster remote console performance

$2,599 (Save $498)

Lease for just $69/mo.*

SmartBuy (PN: 605869-005)



HP ProLiant BL465c G7 Server

- AMD Opteron™ Processor Model 6128HE
- 8 GB memory, up to 256 GB max
- Up to two (2) hot plug small form factor SAS, SATA, or SSD drives
- Integrated Lights-Out 3 (iLO 3) providing industry-leading management and 8X faster remote console performance
- Two Integrated HP Virtual Connect FlexFabric Converged Network Adapters

Starting at $3,079

Lease as low as $88/mo.*

Copyright © 2010 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. AMD, the AMD Arrow logo, AMD Opteron and combinations thereof are trademarks of Advanced Micro Devices, Inc.

[1,2]For details on claim substantiations, visit hp.com/servers/unleash5

*Prices shown are HP Direct prices; reseller and retail prices may vary. Prices shown are subject to change and do not include applicable state and local taxes or shipping to recipient's address. Offers cannot be combined with any other offer or discount and are good while supplies last. All featured offers available in U.S. only. Savings based on HP published list price of configure-to-order equivalent (HP ProLiant DL385 G7 server: $3,097–$498=SmartBuy price $2,599; HP ProLiant BL465c G7 server: starting at $3,079). Financing available through Hewlett-Packard Financial Services Company and its subsidiaries (HPFSC), to qualified commercial customers in the U.S. and is subject to credit approval and execution of standard HPFSC documentation. Prices shown are based on a lease 48 months in term with a fair market value purchase option at the end of the term and are valid through December 31, 2010. Other charges and restrictions may apply. HPFSC reserves the right to change or cancel this program at any time without notice.

hp

1&1® WEB HOSTING

"Working with startup companies on a tight budget, my clients know an online presence is needed. I use 1&1 exclusively to satisfy their requests for reliable hosting at affordable rates."

Lance Ochs, www.vacantpixels.com

PROFESSIONAL WEBSITES
6 MONTHS FREE!*

MEMBER OF united internet

*Offers valid for a limited time only. 12 month minimum contract term applies for web hosting offers. Setup fee and other terms and conditions may apply. Mobile software selection dependent on hosting package and requires a Windows PC. Domain offers valid first year only. After first year, standard pricing applies. Visit www.1and1.com for full promotional offer details. Program and pricing specifications and availability subject to change without notice. 1&1 and the 1&1 logo are trademarks of 1&1 internet AG, all other trademarks are the property of their respective owners. © 2011 1&1 Internet, Inc. All rights reserved.

As the world's largest web host, we know the developer features you need in a hosting package!

.com
.info .org
.net

Domains Included
All hosting packages include domains, free for the life of your package.

Unlimited Traffic
Unlimited traffic to all websites in your 1&1 hosting package.

Developer Features
Extensive language support with PHP 5/6 (beta) with Zend Framework and git version management software.

Online Marketing Tools
SEO tools to optimize your website. 1&1 Webstatistics makes it easy to monitor your progress.

Green Data Centers
We're committed to hosting your site with a minimal impact on the environment.

1&1® HOSTING PACKAGES
6 MONTHS FREE!*

1&1® BUSINESS PACKAGE:

- 3 Included Domains
- Private Domain Registration
- 250 GB Web Space
- UNLIMITED Traffic
- NEW: Version Management Software (git)
- 2,500 E-mail Accounts
- 50 MySQL Database (100 MB)
- 25 FTP Accounts
- E-mail Marketing Tool
- 24/7 Toll-free Customer Support

~~$0.99~~ per month*

Need more domains?
.info domain only $0.99 first year*
.com domain only $4.99 first year*

More great offers available on our website!

1&1®

Get started today, call 1-877-GO-1AND1

www.1and1.com

Here's what finance officers would like you to know

WHAT CFOs WANT From IT

— before you come knocking.

BY MARY K. PRATT

YOU CAN'T RUN A COMPANY without technology, but you can't invest in technology without the blessings of the finance department. And thanks to the stagnant economy, the pendulum of power between Finance and IT is swinging decidedly toward the chief financial officer's door these days.

"The power dynamic in the C-suite really does change when the economic times are difficult," says Bob Martins, a CFO partner at Tatum LLC, an executive services firm

EUAN MYLES / GETTY IMAGES

HINT: CFOs Like Cloud Computing

Perhaps you've already discovered this, but cloud computing (including software as a service) is a CFO-friendly topic.

CFOs like the pay-as-you-go economics of cloud computing because it keeps cash in the bank longer, notes a Forrester Research report.

"To a CFO, IT capacity or an application purchased from a cloud service provider is an operating expense that can be scaled up to meet a rising business need – or turned off when the need evaporates. The same system hosted in the corporate data center is a sunk cost that includes a capital expenditure that must be carried on the balance sheet as an asset that loses value as it depreciates," the report explains.

Forrester says that because of the difference between capital expenditures and operating expenditures, cloud computing yields the kind of financial benefits that CFOs value:

- **Better cash flow.** The company avoids taking on debt and writing a big check upfront. Instead, checks are written monthly or quarterly.
- **Lower financial risk.** With a cloud-based system, you pay only for what you use, and you can terminate the contract. An on-premises system means spending money upfront for benefits that may or may not materialize.
- **Greater financial visibility.** A cloud services provider can tell you how much it will cost to add a user or process an additional transaction. Many IT shops would be hard-pressed to do the same for an on-premises system.
- **Healthier return on assets.** Cloud costs are incurred in the same time period that the value is delivered, so the balance sheet doesn't carry an ever-depreciating capital asset of hardware and software, which lowers the increasingly important financial metric of return on assets.

In a recent survey of 481 CFOs in the U.S., about half said they already have some IT activities occurring in the cloud. The survey by Duke University and *CFO* magazine found that 83% of the CFOs expect their companies to rely on cloud-based services in the next three to five years.

– MITCH BETTS

headquartered in Atlanta. "And right now, any kind of spending decision requires much more scrutiny."

All of this means that now is an excellent time for you, as an IT manager, to hear what Finance has to say. *Computerworld* asked several CFOs what message they'd most like to get through to their top technologists.

Say Goodbye to Bells and Whistles

During better economic times, Don MacKenzie, CFO and chief operating officer at Accounting Management Solutions Inc., could be persuaded to buy a more expensive system if it offered nice-to-have usability options or extra functionality.

But these days, the age-old battle between cost and functionality is being won by cost. So when the Waltham, Mass.-based professional services firm needed new customer relationship management software, MacKenzie told his CIO at the outset, "Maybe we don't need the Cadillac. Our problem might be better solved using a Chevy solution."

MacKenzie expected the CIO to deliver an analysis that looked at several systems — something he has always done, in good times and bad — detailing how much each one cost, the features offered and what type of ROI each one could be expected to deliver. But MacKenzie admits that given the financial pressure, the weight was almost all on the cost side of the equation.

"I'm not suggesting that there wouldn't have been a financial analysis [in the past]," MacKenzie continues, "but the focus then would have been more on functionality and on [the software's] tie-in to other applications. That might have overridden the financial considerations."

These days, that's not the case. One of the options the CIO presented was "a 300-pound gorilla with all the bells," MacKenzie says, "but we went with one that was a lot cheaper."

Play With the Toys You Already Have

Tibco Software Inc. in Palo Alto, Calif., has made significant investments in IT in the past, including the acquisition of an ERP system. So before Executive Vice President and CFO Sydney Carey opens the coffers to buy more hardware or software, she wants to make sure that the company is making full use of its current resources.

"The recession has focused us more on the fact that we've made investments," she says, "so we need to ask, 'Are we really getting all we can from them?' "

Specifically, Carey explains, "we needed to leverage our systems, automating or integrating or getting the right information to the right people at the right time to make decisions" — but without making any more big investments in infrastructure.

That meant working with the CIO and the IT staff to get more value from the ERP system. Carey had the IT staff add business process management software and other programs to the ERP front end to make the company's order fulfillment system run more efficiently.

Although the software additions did require some in-house development, they represented a quicker and cheaper investment than buying and rolling out an entirely new system. Yet the results were significant: Carey says the department that handles orders has been able to increase accuracy and double the number of transactions handled each quarter without adding staff.

Continued on page 22

© FOTOLIA / JS

Smarter technology for a Smarter Planet:

What 3 million lines of code means to a piece of luggage.

It means Amsterdam Airport Schiphol will be able to accurately and efficiently move 70 million pieces of luggage per year—20 million more bags per year than they used to. The airport's automated baggage solution will allow them to increase their baggage handling capacity by 40%, so they can meet the growing demand placed on them as one of Europe's largest transport hubs. This system is built on IBM Rational® and Tivoli® software and runs on Power Systems.™ A smarter business is built on smarter software, systems and services.

Let's build a smarter planet. ibm.com/luggage

IBM®

A data visualization of the flow of baggage traffic at Amsterdam Airport Schiphol.

IBM, the IBM logo, ibm.com, Power Systems, Rational, Tivoli, Smarter Planet and the planet icon are trademarks of International Business Machines Corp, registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at www.ibm.com/legal/copytrade.shtml. © International Business Machines Corporation 2010.

> **The recession has focused us more on the fact that we've made investments, so we need to ask, 'Are we really getting all we can from them?'** – **SYDNEY CAREY,** EXECUTIVE VICE PRESIDENT AND CFO, TIBCO SOFTWARE INC.

Continued from page 20

Know What the Business Needs Now

Being aware of the company's business strategy is always a priority for IT managers, but in tough times, it's imperative for IT to be up to date and ready to help with corporate changes on an almost daily basis, CFOs say.

For example, Teknor Apex Co., a custom compounder of advanced polymers in Pawtucket, R.I., recently completed a major acquisition, and CFO Jim Morrison says he had to make sure IT understood the challenges the merger presented.

His message to IT: Bringing the new acquisition into the fold is your No. 1 priority for the foreseeable future. For six to nine months, IT will be "pretty much consumed" with the acquisition — indeed, "the whole company will be," says Morrison.

The acquisition illustrates the need for the IT department to help drive forward the company's strategy and be able to rapidly adjust priorities as the strategy evolves. To be sure, Morrison supports his CIO's road map of long-term strategic initiatives intended to increase efficiencies and save money, but he also needs IT to be able to shift resources as corporate events warrant.

Tatum's Martins agrees. He says a CIO needs to understand his company's short-term financial situation, its near-term tech requirements, and its current risk-tolerance level — as well as its future vision. Understanding all that, he says, will help a CIO better identify and prioritize the projects that mesh with the company's immediate needs.

Show Me an ROI That I Can Trust

Martins advises CIOs to look beyond price tags and projected savings when they're making a case for a tech investment. He says those figures aren't really enough to calculate the true return an IT investment will generate.

"I see ROIs all the time that can have a wide range of values depending on how you work your assumptions," he says.

Martins, who works in the Washington, D.C., area as interim CFO for a government contractor and as a financial adviser to two other companies, says CIOs need to include more details in the ROI figures they present. For example, he says, if a $500,000 investment helps generate $2 million in revenue, the ROI needs to account for the revenue that would have been earned anyway.

And IT managers also need to identify the risk associated with each investment.

"If there's a $500,000 expenditure, you have to consider the magnitude of success, the probability of success, and the risk if you don't succeed," Martins explains. "Because if you properly discount the probability of return but don't factor in the cost of risk, then you're not really presenting an accurate ROI."

He cites a case he has knowledge of but didn't work on directly, where an IT department implemented a $2 million CRM system that was approved without calculating the whole range of costs associated with it or how much it would generate in returns.

The company ended up with a system that did half of what it was expected to do but cost twice as much as anticipated — all just as the economy tanked and the company's market shrank.

"It's been a significant drag on that company's performance," Martins says. Further, it limited the company's ability to generate new business at a crucial time. With more-accurate pre-investment projections, the company might be in a better place today — or at least it would be using a less expensive CRM system.

Continued on page 24

WHAT CFOs WORRY ABOUT

Is there something IT can do to ease your CFO's mind?

Top macroeconomic concerns:

1	Weak consumer demand
2	The federal government's agenda
3	Intense price competition
4	Credit markets/interest rates

Top internal concerns at their own firms:

1	Maintaining profit margins
2	Cost of healthcare
3	Difficulty forecasting results
4	Attracting and retaining qualified employees

Base: 481 chief financial officers in the U.S.; multiple responses allowed.

SOURCE: DUKE UNIVERSITY AND *CFO* MAGAZINE, DECEMBER 2010

Top risks in the next five years:

1	Financial exposure
2	Supply-chain/logistics disruption
3	Legal liability, reputational harm
4	Technology failure
5	Security breach

Base: 168 senior finance executives; multiple responses allowed.

SOURCE: CFO RESEARCH SERVICES AND LIBERTY MUTUAL INSURANCE CO., JUNE 2010

Discussion Underway

(want in?)

The Computerworld LinkedIn Forum
is a community for all things IT:
news, analysis and discussion about
topics within IT, including careers,
management and hot topics.
If you are an enterprise IT practitioner
at any level we'd love to have you join.

Apply for membership today at
www.computerworld.com/linkedin

COMPUTERWORLD
on **Linked in**

Continued from page 22

Emphasize Short-term Benefits ...

Breslin Longstreth wants his CIO to seek out projects that deliver benefits quickly.

"It's all about the short-term and medium-term returns," says Longstreth, senior vice president of finance at A Place for Mom Inc., a Seattle-based service that helps people find care options for elderly parents.

Case in point was the company's decision to revamp all software licenses, standardize equipment, and upgrade and integrate phone and computer services. Longstreth says the company was looking at a six-figure investment to get the project done — he declined to disclose the actual price tag — but found that the ROI would likely be realized within a year.

"We move quickly if we think there's a strong, quick ROI. If it's not obvious, we're probably not going to do it," says Longstreth.

He says A Place for Mom, a private, $50 million operation, is growing so quickly that it's hard to predict what it will require from IT beyond the next few years. That's one reason he encourages his top IT person, the vice president of development, to think about projects with quick returns.

The economy is another reason, Longstreth says. Although the company is financially healthy, he says he doesn't want to risk leaving it cash-strapped by investing in technology that has a long-term ROI. "Making a bet on something with a return three to five years out has too much risk right now," he says.

> **We look at IT as an enabler of a lean company.**
>
> **JIM MORRISON,**
> CFO, TEKNOR APEX CO.

... But Don't Abandon Long-term Investments

Even with the economy in the dumps, Teknor Apex's Morrison wants his CIO to continue proposing projects that will help the company reach its long-term goals.

"If there's a project needed for our strategic well-being, I don't necessarily [want IT to] put it on a back burner because the economy has taken a downturn," Morrison says.

As a private company that's not driven by quarterly performance, Teknor Apex has the luxury of being able to focus more on long-term results, Morrison acknowledges. But that doesn't mean he can fund IT projects that don't support the corporate agenda — especially in today's economy.

"Outside of upgrades of hardware, everything we do from an IT perspective is put forth as either being strategic in nature or increasing our efficiencies," Morrison explains.

When the market went south in 2007, Morrison says, the company reduced its head count by 5% to 10%, but at about the same time he OK'd spending $150,000 for software for the credit department. "It was probably one of the best projects we ever did," he says, explaining that it allowed the company to reduce staff in the credit department while improving performance. As a result, the new system paid for itself within two years.

Morrison says those are the kinds of technology investments he'd like to see IT managers bring forward.

"We look at IT as an enabler of a lean company. I don't think there's a function that doesn't feel that the IT systems are absolutely essential to their performance," he says. "So we give them what's needed. They just have to show there's a good return." ◆

Pratt *is a* Computerworld *contributing writer in Waltham, Mass. Contact her at marykpratt@verizon.net.*

HOW TO
Sell IT Projects To the CFO

Most CFOs still see IT as a black box — they have limited visibility into the value that IT creates for their organizations, says Gregg Rosenberg, managing director of the IT practice at The Corporate Executive Board, a research and advisory services company.

So it's no wonder that IT managers have a tough time persuading their CFOs to spend money on new technology today, Rosenberg says.

By making changes in their pitches, IT managers can overcome that roadblock and get the CFO's stamp of approval for more projects, Rosenberg and other consultants say. Those changes should include reframing proposals and spending requests to highlight the business value that technology creates.

In a white paper, Rosenberg suggests that CIOs should take the following steps to get their economic houses in order and make it easier for CFOs to see the value of the services that IT provides to the business:

- **Find out the business objectives of the stakeholders.**
- **Allocate all IT costs to a set of services that the business wants.**
- **Hold IT service managers accountable for controlling the costs of the services they provide.**
- **Define units of service in terms that the business understands, and show how changes in IT service consumption affect costs.**
- **Reward IT staffers for lowering the total cost of service.**
- **Set the prices for IT services to support overall business objectives, such as cost predictability.**
- **Invest in IT asset management for making resource allocation decisions (not for reacting to audits).**

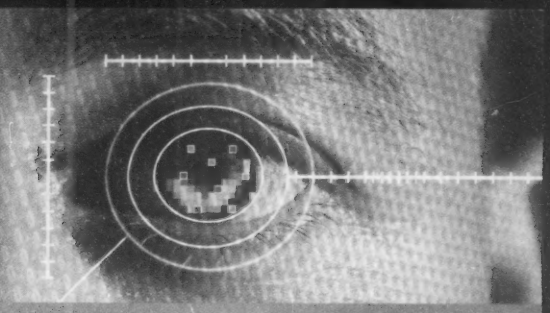
Most of all, CIOs should communicate using the business metrics — like "decrease unit costs" — that really matter to the company's leaders, says Saby Mitra, an associate professor in the College of Management at the Georgia Institute of Technology.

— MARY K. PRATT

© FOTOLIA / SVEN BÄHREN

CSO Executive Seminar Series on

Securing the Cloud



January 26, 2011 | **New York Marriott Downtown** | **New York City**

Please note the date change for this event: it will now be held on January 26, 2011.

Ensure Your Move to the Cloud is Secure

Presented by

CSO
BUSINESS RISK LEADERSHIP

Clouds promise to deliver unprecedented business efficiencies, but securing data and processes in the cloud can be tricky.

At this exclusive executive seminar on Securing the Cloud, you'll gain real-world insight into how business leaders are securing their cloud environments, and:

- **Discover the best strategies** for assessing security risks and needs for the cloud.
- **Determine which applications** to move to the cloud and how to apply the right security.
- **Gather up-to-the-minute** advice from the industry's leading practitioners and recognized experts.
- **Network with colleagues** who wrestle with similar challenges and concerns.

Featured Speakers Include:

Jim Reavis
Co-founder, *Cloud Security Alliance*

Derek Slater
Editor in Chief, *CSO magazine*

David Giambruno
CIO, *Revlon*

Nick Akerman
Partner, *Dorsey & Whitney LLP*

Whether you're assessing specific moves to the cloud or are seeking the latest expert advice, this seminar series will help you better understand cloud security and how you can improve your business by applying it wisely.

Join us on JANUARY 26TH in NEW YORK CITY for this UNIQUE EVENT!

REGISTER NOW: **http://events.csoonline.com/csad**

CSO Executive Seminar on Cyber Security | Washington, DC – March 2011
CSO Executive Seminar on Securing the Cloud | Chicago, IL – May 2011

Sponsorship Opportunities Are Available

CSO Executive Seminar Series attracts a powerful and influential audience of security decision makers. For Sponsor Opportunities, contact Per Melker at 508.935.4729 or e-mail pmelker@cxo.com

SECURITY

SixLeaks

Right Now

Even companies with great security may have left these holes open.

By John Brandon

JUST AS THE TITANIC was thought to be unsinkable, many of today's enterprises think of themselves as invulnerable. Yet, for every large organization that glides through the year without any mishaps, there are many others that suffer break-ins, Wi-Fi sniffing snafus and incidents where Bluetooth "sniper rifles" are used to steal company secrets.

Security consultants have identified six holes that are often wide open in corporate IT systems, even at companies that take great pride in their security precautions.

1 Unauthorized Smartphones On Wi-Fi Networks

Smartphones create some of the greatest risks for enterprise security, mostly because they're so common and because some employees just can't resist using personal devices in the office — even if their employers have well-established policies prohibiting their use.

"The danger is that cell phones are tri-homed devices — Bluetooth, Wi-Fi and GSM wireless," says Robert Hansen, founder of Internet security consulting firm SecTheory LLC. Employees who use their personal smartphones at work "introduce a conduit that is vulnerable to potential attack," he explains.

If you use a device like a smartphone that spans multiple wireless spectrums, "someone in a parking lot could use a Bluetooth sniper rifle that can read Bluetooth from a mile away, connect to a smartphone, then connect to a corporate wireless network," says Hansen, who is also known by the alias RSnake. Bluetooth thus becomes an open portal that allows hackers to access Wi-Fi and therefore the corporate network.

Hansen says adopting a policy that simply prohibits personal smartphones isn't likely to be effective — employees will still be tempted to use their gadgets. Instead, he says, IT should allow only approved devices to access the network. And that access should be based on MAC addresses, which are unique codes that are tied to specific devices, making them more traceable.

Another tactic is to use network access control to make sure whoever is connecting is, in fact, authorized to connect. In an ideal world, companies should also separate guest access Wi-Fi networks from important corporate networks, says Hansen, even if having two wireless LANs requires redundant systems and added overhead.

Another approach: Provide robust, company-sanctioned smartphones on popular platforms, such as Google's Android, thereby dissuading employees from using nonsupported devices. By encouraging the use of approved phones, IT can focus on security precautions for a subset of devices instead of having to deal with numerous brands and platforms.

2 Open Ports on a Network Printer

The office printer is another seemingly innocuous device that represents a security risk, although most companies are oblivious to the danger. Printers have had telephone lines for faxes for several years, and some are now Wi-Fi-enabled or support 3G wireless connectivity. Some companies do block access to certain ports on printers, but as Hansen says, if there are 200 blocked ports for printers at a large company, there might be another 1,000 ports that are wide open. Hackers can break into corporate networks through these ports. A more nefarious trick is to capture images of all printouts in order to steal sensitive business information.

> Injecting **hostile code** into P2P files is [not difficult] and **can create a beachhead** within an organization.
>
> **WINN SCHWARTAU,** CEO, THE SECURITY AWARENESS COMPANY

"One of the reasons you do not hear about it is because there is no effective way to shut them down," says Jay Valentine, an independent security expert. "We see access all the time via network ports in the electric utility industry, which is a major accident waiting to happen."

The best way to deal with this problem is to disable the wireless options on printers altogether. If that's not feasible, IT should make sure all ports are blocked for any unauthorized access, says Hansen. It's also important to use security management tools that monitor and report on open printer ports. One such tool is the network monitor from ActiveXperts Software BV.

3 Custom Web Applications With Bad Code

Just about every enterprise security professional lives in fear of holes created by sloppy programming. This can occur with custom-developed applications and with commercial and open-source software. Hansen says one common trick is to tap into the *xp_cmdshell* routine on a server, which an inexperienced programmer or systems administrator might leave wide open for attack. Hackers can use that opening to gain full access to a database, which provides an entryway to data and a quick back door to networks.

Hansen says PHP routines on a Web server can also be ripe for attack. Small coding errors, such as a failure to use proper safeguards when calling a remote file from an application, provide a way for hackers to add their own embedded code. A company can also be open to attack if it has a blog with a trackback feature (to report on links to its posts) but doesn't sanitize stored URLs to prevent unauthorized database queries.

Of course, the obvious fix to this problem is to avoid using freebie PHP scripts, blog add-ons and other code that might be suspect. If such software is needed, security monitoring tools can detect vulnerabilities even in small PHP scripts.

© FOTOLIA / SASCHA BURKARD

4 Social Network Spoofing

Facebook and Twitter users can be fooled into divulging sensitive information. Usually, these types of attacks are subtle and not easily traced.

"People looking for jobs are often willing to divulge [personal] information," notes Hansen, who says one of his clients told him about a hacker who used a fake e-mail address from a job-search Web site to pose as a recruiter. He declined to elaborate on this example to protect his client, but it's an example of what he calls the "confused deputy" scenario, where someone claiming to be, say, a recruiter for Monster.com contacts an employee, and the employee believes that the caller is, in fact, a Monster.com recruiter and doesn't attempt to verify his credentials. Hansen says the same thing can happen with postal mail — just because the envelope has a certain return address, that doesn't mean it actually came from that sender.

Companies should use e-mail verification systems that validate senders' identities by generating return messages that ask senders to confirm their credentials. Some states have made it illegal to impersonate someone by e-mail.

5 Employees Downloading Illegal Movies and Music

P2P networks just won't go away. In a large company, it's not uncommon to find employees using peer-to-peer systems to download pirated files or setting up their own servers to distribute software.

"P2P networking should, as per policy, be completely blocked in every enterprise," says Winn Schwartau, CEO of The Security Awareness Company, a security training firm. "The P2P ports should be completely shut down at all perimeters and ideally at the company's endpoints. P2P programs can be stopped through [whitelists or blacklists] and filters on the enterprise servers."

Schwartau tells the story of a financial services firm in New York that discovered a P2P port that was running all day, every day, in its office. It turned out to be a porn file server — exactly the kind of P2P server that criminal hackers like to exploit, he says.

"Injecting hostile code into P2P files is [not difficult] and can create a beachhead within an organization, depending upon the code design," Schwartau says. He suggests a technique called "resource isolation" that controls which applications users are allowed to access based on permission rights. Different operating systems do that in slightly different ways, Schwartau says, but it's worth pursuing in situations where corporate policy is lacking or isn't followed.

Schwartau encourages IT shops to conduct regular sweeps of all company networks and servers to look for P2P activity and to be vigilant about blocking any P2P activity.

6 SMS Spoofs and Malware Infections

Another potential attack vector: text messaging on smartphones. Hackers can use SMS text messages to contact employees in direct attempts to get them to divulge sensitive information like network log-in credentials and business intelligence, but they can also use text messages to install malware on a phone.

"In our proof-of-concept work, we showed how a rootkit could turn on a phone's microphone without the owner knowing it happened," says Schwartau. "An attacker can send an invisible text message to the infected phone telling it to place a call and turn on the microphone." That would be an effective tactic if, for example, the phone's owner were in a meeting and the attacker wanted to eavesdrop, he notes.

Schwartau says it's possible to filter SMS activity, but that's usually handled by the wireless carrier because SMS isn't IP-based and therefore isn't usually controlled by company administrators. The best option is to work with carriers to make sure that they're using malware-blocking software and SMS filters to prevent those kinds of attacks.

Again, creating smartphone usage policies that encourage or require the use of only company-sanctioned or company-provided phones and service plans can reduce the risk.

Of course, companies can't thwart every possible attack, and hackers are constantly switching tactics. But you should take steps to plug these six security leaks — and then try to keep them plugged — and be on the lookout for new forms of malicious activity. ◆

Brandon *worked as an IT manager for 10 years and has been a tech journalist for another 10.*

Security Risks In the Post-PC Era

As handheld gadgets such as smartphones proliferate in the enterprise – in what Forrester Research Inc. calls the "post-PC era" – six new data security risks arise:

- **Employees lose the devices, or unscrupulous individuals steal them.** The number of company-owned smartphones lost by the average North American and European enterprise during the past two years was 50% higher than the number of laptops reported lost or stolen: 11 lost smartphones versus seven lost laptops. More lost devices means more lost data.
- **IT doesn't control application deployment.** For example, apps are usually added to Apple devices by employees who buy them from the App Store.
- **Third-party apps may not be trustworthy.** Users install an average of 40 apps on iPhones and 25 on Android devices. Not all of those apps are safe: Some steal data or otherwise fail to behave as advertised.
- **Support is a lot more complicated.** The sheer diversity of devices makes it harder to know what you can safely allow on your network, particularly with Android devices.
- **The mobile device management (MDM) aftermarket is immature.** A cottage industry of specialized MDM vendors has sprung up to manage the configuration and security of diverse mobile devices, but a convergence of post-PC and PC management systems is still years away.
- **There are legal uncertainties about data ownership.** Questions of who owns the data on employee smartphones – and who is responsible for protecting it – have yet to be answered. Case law that definitively settles this matter won't emerge for years.

SOURCE: FORRESTER RESEARCH INC., OCTOBER 2010

DYNAMICS™

In 1950, all credit cards were created equal
In 2011, all that changes

www.poweredcards.com

Dynamics would like to thank its first issuer

citi®

FINOVATE FALL 2010 BEST OF SHOW

DEMOgod™

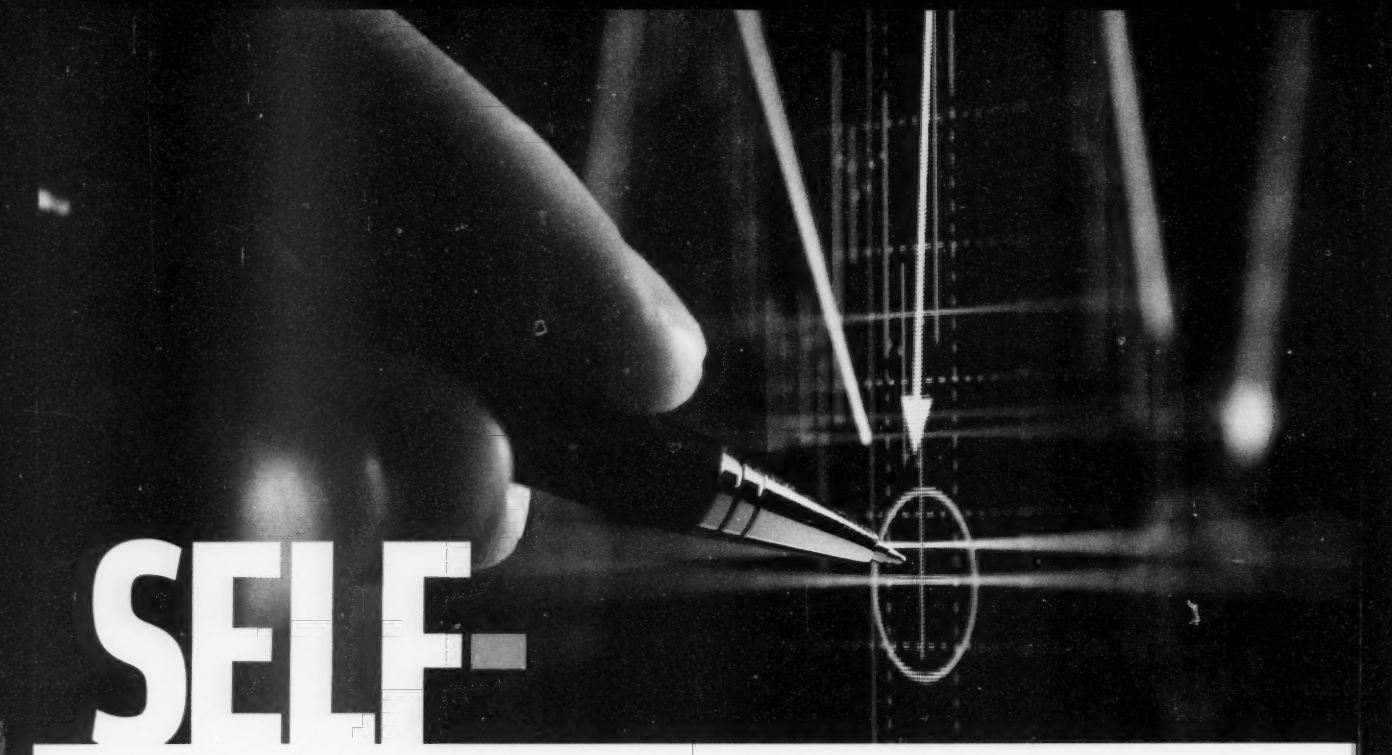
DEMO Fall 2010
DEMOgod Winner

DEMO people's choice

DEMO Fall 2010
People's Choice Award Winner

INNOVATIONS BEST OF INNOVATIONS 2011

© 2011 Dynamics Inc. All rights reserved. The Dynamics logo, Hidden, Redemption, and MultiAccount are trademarks of Dynamics Inc.
Citi and Arc Design is a registered service mark of Citigroup Inc.



SELF-SERVICE BI CATCHES ON

The goal is to help business users make smart decisions with complex data — and less IT involvement.

By Elisabeth Horwitt

THE GREAT RECESSION caught most of the used-car industry by surprise. Many dealers assumed that the downturn would be short and mild, so they continued to add inventory at a steady rate. As a result, many used-car inventory-financing firms didn't make adjustments until it was too late.

Dealer Services Corp. (DSC), in contrast, got a heads-up from its newly deployed business intelligence system, says CIO Chris Brady. The self-service BI module of Information Builders Inc.'s WebFocus software allowed branch managers to see early signs of the economic slowdown, without having to get technical help from the IT department.

Self-service BI appears to be the next big wave in business intelligence. In a January 2010 report, Gartner Inc. pointed to growing demand among businesses for a "data discovery tool architecture" that provides end users with data and reports and enables them to navigate and visualize data in a "surf and save" mode. This means that data views can be stored for reuse or sharing. The self-service tools bring BI information to nontechnical users; they also benefit high-level analysts who need ad hoc reports right away.

At Carmel, Ind.-based DSC, which provides financing for about 10,000 car dealers, each vehicle receives a separate loan with its own conditions and payback schedule. "That's a lot of data," says Brady. The company originally used a basic transaction-reporting system, but that rapidly became inadequate as the business grew.

End users inundated IT with requests for more data and different

© FOTOLIA / IRONCHKA

> **We needed to get data into the hands of users in departments like sales . . .** and give them tools so they could analyze data themselves.
>
> **SCOTT BAKER,** MANAGER OF SAP SYSTEMS, ORASURE TECHNOLOGIES INC.

views. The more technically savvy tried to do their own analyses with Excel spreadsheets, but that often resulted in inconsistent and inaccurate data, Brady explains. So the company looked for a BI system that would put as much querying power as possible in the hands of end users via Web-based query and reporting tools.

In addition to reducing the burden on IT and business analysts, WebFocus has increased the quality and consistency of data — and has thereby improved the decisions that are based on that data, Brady reports.

When the recession hit, WebFocus' self-service module proved its worth by enabling branch managers to see which dealers had inventory that was aging past a certain point, Brady says. This was "a key indicator — a very, very early warning sign," she adds.

Forewarned of the slowdown in inventory turnover, DSC was able to minimize the recession's impact. It tightened its lending standards and adjusted financial reserves. It also offered advice to troubled dealerships; one of the messages was "Stop buying SUVs; they aren't selling," Brady says.

As a result, "we definitely reduced our losses from bad loans and didn't start to see a negative effect until the very end of 2008," about six months later than competitors, she estimates.

One key factor driving the self-service BI market is the rapidly growing volume and complexity of data needed to make decisions. In today's volatile and cutthroat global business environment, business users need more information than ever, and they need it faster than ever.

Further, the recession has forced companies to lay off or stop hiring IT staffers and business analysts, forcing everyone to do more with less, says Jim Kobielus, an analyst at Forrester Research Inc.

As a result, many IT staffs face growing backlogs of information requests from increasingly frustrated end users. But self-service features such as browser-based interfaces, interactive graphics, drop-down lists and software guides can help. They buffer less-technical end users from the complexities of the underlying data infrastructure. This frees up IT professionals from having to spend "an inordinate amount of time" responding to requests for new data, new views or updated report formats, Kobielus says.

Consider the case of OraSure Technologies Inc. Before turning to self-service BI, the medical device maker's two-person data team couldn't keep up with end users' information demands, according to Scott Baker, Bethlehem, Pa.-based OraSure's manager of SAP systems. "We needed to get data into the hands of users in departments like sales, finance and budgeting, and give them tools so they could analyze data themselves," he says. "We used to create standard reports, and people were always saying they needed more information — this but not that."

End users at OraSure can now create their own dashboards "on the fly," using SAP BusinessObjects' self-service system, Edge, Baker says. And BusinessObjects' Explorer module "lets you select the filters and data you want, and then presents it to you graphically," he says. End users can also create reports using SAP Crystal Reports or Microsoft Excel.

"BusinessObjects is good at buffering users from the technical layer," Baker says. For example, users "don't see [data] field definitions but terms they work with in their jobs, like 'quantity shipped.' "

The payback? End users have generated more than 160 reports themselves, Baker says. "That's 160 reports the IT group didn't have to generate," he adds.

A Broad User Base

Self-service BI isn't just for the "average" end user with limited technical and analytical expertise, says Forrester analyst Boris Evelson. Business analysts need to do predictive analytics, multidimensional querying and data mining. Knowledge workers and power users want to do ad hoc querying and generate their own reports and views. Self-service BI platforms enable them to do that while shielding them from the underlying data infrastructure, so they don't have to keep asking IT for help.

Flexibility was key at IXI Corp., a unit of Atlanta-based Equifax Inc. that provides risk and performance management consulting services. With IXI's old BI system, it was too difficult to make any changes to a data report, says Russ Ayres, the company's senior vice president of customer insight. Requests for changes meant that the underlying data models had to be revised and then approved, which was a slow process. Hard-coded data structures weren't cutting it with IXI's customers, whose data needs change on a daily basis, Ayres explains.

The company addressed these challenges by using Tibco Software Inc.'s Spotfire. IXI analysts use Spotfire to do rapid and flexible data querying across multiple data sources, Ayres says. On average, creating a new view takes a quarter of the time it used to, he adds, "so we're about four times as productive."

Despite their enthusiasm for self-service BI, IT executives acknowledge that easy-to-use BI tools can be dangerous because of the power they put in the hands of end users.

Data governance, security, and centralized monitoring and control of user interactions are critical for any BI system, but particularly for self-service setups that give less-technical end users direct access to the corporate data infrastructure.

"Governance is where we [IT professionals] come in," says IXI's Ayres. "When you give someone a loaded weapon, they can always shoot themselves. Someone could do a broad search across a 5TB database and bring a

Data Democracy
In a survey of 306 IT managers,
47%
said they plan to make business intelligence technology available to more employees in the next 12 months.
SOURCE: COMPUTERWORLD SURVEY, OCTOBER 2010

server to its knees, or worse. BI doesn't stop you from making the wrong choices; it just helps you make them faster."

To avoid this problem, Ayres' team has built a layer between the user and BI tools, "so you can dance around the playground, but within limits." For example, an employee might be allowed to run metrics in a data mart at some levels but not others, and he wouldn't be allowed to summarize across different levels.

Most of the major BI platforms support role-based access control, through Microsoft Active Directory or any other LDAP-compliant global directory. Packages offer different degrees of granularity: For example, a system might be set up so that a particular user group can access only a subset of data, or even just specific data fields.

SAP BusinessObjects provides role-based security down to the record level, says Baker. For example, a salesperson might see only customers in his territory, or a budget manager would see only the cost centers that she's responsible for, while a sales vice president could view reports from anybody who reports to him.

Breaking Down the Walls

The new frontier for self-service BI is the ability to enable different types of users to collaborate, not only by sharing reports and query results, but also by working together to define new ways of viewing and analyzing information.

At DSC, the IT staff regularly meets with a committee of end users, Brady says. "Branch managers tell us their best practices," which are then incorporated into reports and views. IT then uses WebFocus to replicate the best practices across the company.

Self-service BI has "cut way down on the time from getting an idea to building a report that incorporates it, and having it show up on an end user's dashboard," Brady says.

At OraSure, the SAP team participates in business users' forecast meetings. "We talk to them about how they're using information, listen in on discussions of what they're finding, then we brainstorm: If you had this additional information, would that help you get to next level? We work with end users to figure out how to get the best information," Baker says.

OraSure employees collaborate primarily through face-to-face meetings and e-mail. However, Baker says that he is definitely interested in the possibility of providing more dynamic and ongoing interactions through Web 2.0 tools such as social networks, wikis and blogs.

So are a lot of other companies, according to Forrester's Kobielus. Businesses are starting to use collaborative mashups to enable teams of users to develop charts, dashboards or reports online, and then make them available on blogs, wikis or Facebook, he notes. Vendors currently offering such capabilities include Lyzasoft Inc., Tableau Software Inc. and JackBe Corp.

With proper governance and security controls in place, implementers say, self-service and collaborative BI can break down long-standing barriers among different departments and levels within an organization. This in turn promotes faster and — most important — more effective decision-making throughout the company. ◆

Horwitt, *a freelance reporter and former* Computerworld *senior editor, is based in Waban, Mass. Contact her at ehorwitt@verizon.net.*

BI Vendors Jump on the Bandwagon

Self-service tools are becoming a must-have for successful BI vendors.

Starting in 2009, small, "visionary" BI companies like Tibco Software, QlikTech and Tableau challenged established BI vendors by introducing "intuitive, interactive BI tools" and "strong, interactive visualization tools for analysis," according to a Gartner report released last year.

The big players have fought back with their own self-service products: Microsoft's PowerPivot, SAP's BusinessObjects Explorer, IBM's Cognos Express and Information Builders' WebFocus Visual Discovery. Pure-play BI vendors such as Targit, MicroStrategy and SAS Institute also have self-service offerings.

However, prospective enterprise buyers should be aware that all self-service tools are not created equal. One of the key differentiators is ease of use, according to Forrester Research analyst Boris Evelson. While most BI vendors claim to have user-friendly and intuitive applications and tools, "what's intuitive to a BI professional is not necessarily intuitive to, say, a marketing analyst," he points out.

End users with limited BI expertise need tools that prompt and guide them through basic BI tasks, as well as customizable report and dashboard templates, he adds.

Other key features include Web portals for sharing information and natural-language interfaces for queries and searches.

Power users such as business analysts, on the other hand, want sophisticated BI tools, such as in-database analytics, that give them the flexibility to drill deep down into databases and create their own views and queries on the fly, but without having to deal with the technicalities of the underlying data infrastructure — which would require IT assistance.

Cost is another major differentiator. Companies that already have a leading BI vendor's platform in place can usually add a self-service front end with minimal effort and cost, according to Forrester analyst Jim Kobielus.

Major BI vendors like IBM Cognos, SAP and Oracle offer entry-level products geared to companies with limited budgets and basic BI needs.

Microsoft's BI software — based on SQL Server, SharePoint and Office — is another low-cost option for small and midsize companies.

Some large organizations are turning to open-source BI platforms such as the BEE Project, Jaspersoft, Pentaho and SpagoBI. However, be aware that "*open source* does not always equal *free software* [and] you will get what you pay for," Evelson says. Some open-source BI products should be labeled "some assembly required," because the various components aren't fully integrated, he says.

Further, some open-source suites lack features and functions needed by large organizations, including robust and integrated security, scalability tools like load balancing, and connectivity to popular data sources, Evelson adds.

Finally, consider outsourcing. Software-as-a-service offerings are now available from some BI vendors, including Tibco (Silver Spotfire), PivotLink and SAP BusinessObjects (Crystalreports.com). In addition to cutting capital and IT staff costs, SaaS offerings enable a business to easily extend the reach of its BI system to remote end users, and to business partners, via the Web.

– ELISABETH HORWITT

Security Manager's Journal

MATHIAS THURMAN

Dangers Under the Rocks

A security manager in a new job is like a gardener lifting rocks and finding out what threats lurk beneath them.

I'M STILL getting acquainted with my new company. As a security manager, that means I'm seeking out all the risks that are lurking in various functional areas.

There are many ways to ascertain risk: assessments, audits, penetration testing, surveys, document reviews. And sometimes you just have to keep your ears open. That was the case the other day, during a meeting with the executive vice president for human resources. We were discussing my training and awareness program, but the topic of remote access came up, which led her to mention that she had a temporary password for the VPN.

This company requires two-factor authentication for remote access. I'm an advocate of that, and I was happy to see it in place here. Now, though, I was being told that access was possible without one of the factors: the token. It seems that when the HR executive had been traveling six months earlier, she had forgotten to take her authentication-token key fob, so the help desk provided her with a temporary password to gain access. But that password is still enabled.

Immediately after that meeting, I sent an e-mail to the administrator of the two-factor authentication infrastructure asking about the password bypass option. In emergencies, he said, users were given a password. OK, then, who has this bypass enabled, and how long has it been provisioned in each case? The answers were startling. This bypass was being used in lieu of key fobs as a quick way to provide remote access not only to forgetful employees, but also to distributors, partners, suppliers and contractors. And some accounts had been in place for more than a year. The existence of two-factor authentication had given me a sense of security that was entirely misplaced.

JOIN IN the discussions about security! **computerworld.com/blogs/security**

This issue with the VPN spurred me to take a closer look at our VPN configuration. We use VPN concentrators, which can be tied to Microsoft Active Directory, and that in turn allows us to set rules that limit access to only the parts of our internal infrastructure that any particular user needs. The result of this inquiry wasn't just startling; it was groan-inducing: Everyone has the same level of access. That includes people who no longer have any need to access our network at all!

"A bypass around two-factor authentication for the VPN was supplied not only to forgetful employees.

Trouble Ticket

» **At issue:** Bit by bit, the risks facing the company are coming into focus. Many of them involve access to the network.

» **Action plan:** Use every possible means to track down unaddressed threats, then prioritize them and set them right.

Well, then, I thought, perhaps it would be a good idea to audit some of our other account management processes. Most IT organizations give administrators privileged accounts that let them handle functions related to domain account administration, e-mail management, backups and restores, and so on. In a Microsoft environment, certain policies can be applied to restrict administrative access to only the required privileged functions. You probably know where I'm going with this. The good news was that I found that our IT admins had taken the time to define two types of administrative accounts, for employees and contractors. The bad news: Both types are given the same amount of administrative access. Of our 80 IT employees, about 30 have administrator accounts that give them access any employee's mailbox, home directories and sensitive data repositories. Luckily, our financial and HR applications, with their salary data and other personal information, are protected with other access controls, but this is still a huge risk. I wasn't merely groaning now; I just about fell over.

As the security manager, I am like a gardener lifting the rocks placed among the plants. I might find grubs and other threats to the plants under some of them, but I have to put the rocks back and prioritize which threats to deal with first.

And so, as time goes on, I will adjust or write policies and processes to deal with the various issues that I have uncovered. And I'll keep lifting those rocks. ◆

This week's journal is written by a real security manager, **"Mathias Thurman,"** *whose name and employer have been disguised for obvious reasons. Contact him at mathias_thurman@yahoo.com.*

OPINION

S.J. VAUGHAN-NICHOLS

Moving Past Passwords

WITH SO MANY WEB SITES demanding passwords, no one, but no one, can really be expected to remember all the ones they need. When the popular Web site Gawker was hacked recently, more than a million user IDs and passwords were exposed. If you were one of the people whose account was compromised, that's annoying. Not that it's a big deal that someone could log into a gossip site under your name. But many of those IDs and passwords were reused on other sites that are a wee bit more important. Now, that's a problem.

What should you do about it? I could tell you that you need to use different passwords for different sites, that you need to pick passwords other than all-time favorite 123456, and that you should change your passwords every month for every site. I'm not going to, though. It's all good advice, mind you, but it's also all pretty darn useless.

People never have, and never will, use good security practices. After more than 30 years of working with networks and security, I'm ready to give up on trying to get the general public to do the right things to keep themselves safe. In a company, it's a different matter. It's a pain, but if you keep at it and enforce the rules, eventually you'll get most of the people to do the right things most of the time. But people at home? It's not going to happen.

Besides, there's another issue here. At work, people need to recall, at most, two or three IDs and passwords. If you do single sign-on right, all they'll need is one. On the public Internet, though, people have to remember their IDs and passwords for their bank, Facebook, Twitter, school, Gmail, phone, electric utility, 401(k), LinkedIn and *Computerworld* accounts, plus countless others.

Who can manage to remember dozens of IDs and passwords for dozens of sites? No one.

I can't do it, and I'm blessed with a good memory for random alphanumeric strings — you really don't want me to get a good look at your credit card. If I can't do it, no one who isn't blessed with a photographic memory can do it.

What I do is keep a long list of user IDs and passwords in my head. Some of them I use only on trivial sites, others I keep only for important sites, and a few I save only for vital sites like my bank.

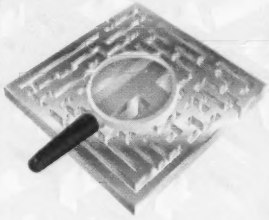
Here's a trick that is security heresy: Make a list of your account numbers, IDs and passwords and encrypt it. Use *real* passwords, though. No "123456" or "abcdef;" no "password" or the name of your favorite team. Those kinds of passwords are so easy to break, they barely count as passwords.

If that option doesn't appeal to you, I've got another one: LastPass. This program runs on all the desktop operating systems that matter and the major smartphone operating systems as well. It will automatically capture your log-in credentials and then enter them into the site for you the next time you visit. So go ahead and use JK1127MarvelFan4TossSaladed! as a password. You won't have to remember it. LastPass, the password manager, will do it for you.

While I'd rather it didn't store these passwords in an encrypted form on the Web, LastPass' advantages more than outweigh its disadvantages in my mind. It certainly beats having your one real password to every system on Earth available to anyone who hacks into any site you visit.

The real solution, though, is to find something else to replace user IDs and passwords. I don't know what that will be. I do know that as we spend more and more of our computing time online at dozens of different sites, we have to come up with a better answer that will really work for people. User IDs and passwords simply don't cut it anymore. ◆

Steven J. Vaughan-Nichols has been writing about technology and the business of technology since CP/M-80 was cutting-edge and 300bit/sec. was a fast Internet connection – and we liked it! He can be reached at sjvn@vna1.com.



dtSearch®

The Smart Choice for Text Retrieval® since 1991

Instantly Search Terabytes of Text

Desktop with Spider

Network with Spider

Publish (portable media)

Web with Spider

Engine for Win & .NET

Engine for Linux

Ask about fully-functional evaluations!

Highlights hits in a wide range of data, using dtSearch's *own* file parsers and converters

- Supports MS Office through 2010 (Word, Excel, PowerPoint, Access), OpenOffice, ZIP, HTML, XML/XSL, PDF and more
- Supports Exchange, Outlook, Thunderbird and other popular email types, including nested and ZIP attachments
- Spider supports static and dynamic web data like ASP.NET, MS SharePoint, CMS, PHP, etc.
- API for SQL-type data, including BLOB data

25+ full-text and fielded data search options

- Federated searching
- Special forensics search options
- Advanced data classification objects

APIs for C++, Java and .NET through 4.x

- Native 64-bit and 32-bit Win / Linux APIs; .NET Spider API
- Content extraction only licenses available

With dtSearch: "Endless indexing is now a breeze"
Computerworld

"Impressive searching power ... handles more than a terabyte of text in a single index"
Network World

"Lightning fast ... performance was unmatched by any other product"
Redmond Magazine

For hundreds more reviews and developer case studies, see www.dtSearch.com

www.dtSearch.com • 1-800-IT-FINDS

Personalized IT newsletters from Tech Dispenser.

You pick the topics. You pick the sources. You pick the frequency.

Build your own newsletter featuring your favorite technology topics — cloud computing, application development, security — over 200 timely topics, from more than 700 trusted sources.

Get started today. It's free.
www.techdispenser.com

TECH DISPENSER

Disturbingly personal newsletters

Career Watch

ASK A PREMIER 100 IT LEADER

Susan G. Schade

The CIO at **Brigham and Women's Hospital** *in Boston answers questions about catching a hiring manager's eye, mentor relationships and more.*

What's the most effective way to get a hiring manager's attention? Include a cover letter with clear career objectives and a summary of key experience, skills and knowledge that you will bring to the position. A résumé that starts by summarizing your key skills and expertise helps. Make your bullet points under each previous position a results-focused statement. A hiring manager may be looking for someone with very specialized skills and knowledge or someone who can be more of a utility player. If you fall into the latter category, a broad range of experience will help, but it is still important to show results. Unfortunately, many hiring managers may "slot" you depending on your experience. I try to route résumés to the right potential hiring managers and HR as soon as I receive them.

I admire one of my departmental managers a great deal. Would it be appropriate for me to initiate a mentoring relationship? Absolutely. If that person is as good as you think, he or she will welcome your request. It is important to define upfront what goals you want to accomplish, how often you will talk and the length of the mentoring relationship. When you reach the end of that defined time frame, the two of you should evaluate how it went, whether your goals were met and if an extension might be useful.

If you have a question for one of our Premier 100 IT Leaders, send it to **askaleader@computerworld.com**, and watch for this column each month.

After being laid off in 2008, I became a self-employed consultant. Recently, my work led to a job offer, and I'm torn. I've grown to like the independence I now have, but it can be nerve-wracking between gigs. My husband wants me to take the job. Any insights? This is a very personal decision for you and your family. You have to know who you are and what kind of environment you thrive in. Do you like being a part of a team, or do you prefer to work with a lot of organizations? Are you looking for financial stability, or can you deal with the uncertainty between positions? At the end of the day, you and your husband need to agree on what you need in terms of financial security and what is going to make you happy.

The Benefits Landscape

In 2010, workers at smaller companies fared better when it came to retaining their level of health benefits.

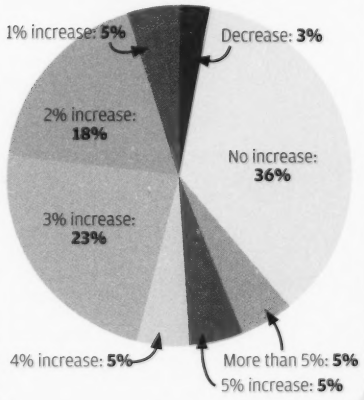
	SMALL FIRMS	LARGE FIRMS
Cut benefits/ increased cost sharing	30%	38%
Increased workers' share of premiums	22%	36%

SOURCE: KAISER FAMILY FOUNDATION SURVEY OF 3,143 EMPLOYERS, Q4 2010. SMALL COMPANIES ARE DEFINED AS THOSE WITH THREE TO 199 EMPLOYEES, AND LARGE COMPANIES ARE THOSE WITH 200 OR MORE.

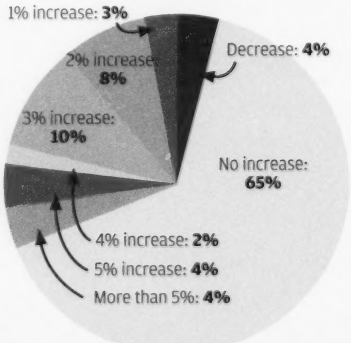
Employers Loosening The Purse Strings

In a recent survey, 61% of hiring managers polled said their companies would increase compensation for existing workers in 2011, up from 57% in 2010. Furthermore, 31% said they would offer higher initial salaries to job candidates, up from 29% in 2010.

What will be the average change in salary for existing employees at your location in 2011?



What will be the average change in initial salary offers at your location in 2011?



SOURCE: CAREERBUILDER ONLINE SURVEY OF 2,482 U.S. HIRING MANAGERS, Q4 2010

Computer Professionals for NJ based IT firm: Software Engrs, Programmers, Business Analysts, Business Systems &/ or Network Analysts, Application Developers, Project leads, IT Mgrs needed. Bach or Master deg. in Engg.,Comp. Sci,MIS,CIS,Sci,Math or Bus. Admin,Mngmt,Ecomcs. with or without exp. reqd. depending on the level of position. Multiple positions available at junior and senior levels. Apply w/2 copies of resume to JSMN International, Inc. 591 Summit Ave, Suite # 522 Jersey City NJ 07306.

Sybase, an SAP Co., has openings in Dublin, CA for Sr. Staff SW Eng Dev. (Job code: CF33942). Serve as sr. tech consultant to biz unit & apply adv expertise in cross-platform SW solution tech. Also for Staff SW Eng I Dev. (Job code: MDB38214). Design & implement performance features for RDBMS products. Refer to job code & send resume to Sybase, 1 Sybase Dr, Dublin, CA 94568. Attn: M. Dris, HR. EOE employer.

Hewlett-Packard Company is accepting resumes for the following positions in Palo Alto, CA: Software Designer (Ref. #PALSWD11). Design, develop, maintain, test, and perform quality and performance assurance of system software products. IT Developer/ Engineer (Ref. #PALITDE11). Research, design, develop, configure, integrate, test, and maintain existing and new business applications and/or information systems solutions including databases through integration of technical and business requirements. Mail resume to Hewlett-Packard Company, 5400 Legacy Drive, MS H1-6E-28, Plano, TX 75024. Resume must include Ref. #, full name, email address & mailing address. No phone calls please. Must be legally authorized to work in the U.S. without sponsorship. EOE.

Hewlett-Packard State & Local Enterprise Services, Inc. is accepting resumes for the position of SERVICES INFORMATION DEVELOPER in Columbus, OH (Ref. #SLCOLSID21); and Dublin, OH (Ref. #SLDUBSID21). Conceptualize, design, develop, unit-test, configure, & implement portions of new or enhanced (upgrades or conversions) business & technical SW solutions through application of appropriate standard SW devlpmt life cycle methodologies & processes. Mail resume to Hewlett-Packard State & Local Enterprise Services, Inc., 5400 Legacy Drive, MS H1-6E-28, Plano, TX 75024. Resume must include Ref. #, full name, email address & mailing address. No phone calls please. Must be legally authorized to work in the U.S. without sponsorship. EOE.

IT Professionals
Patni Americas, Inc., an established and expanding IT consulting company with headquarters in Cambridge, MA is searching for qualified IT Professionals (i.e., Software Consultants, Software Engineers, Programmer/Analysts, Systems Analysts, Database Analysts, QC Engineers, Business Analysts); Information Systems and Project Managers; Program Managers; and account/sales managers for its growing team. Technical positions require a Bachelor's degree in computer science, engineering or a related field and/or relevant industry experience. For our Information Systems and Project/Program Manager positions we prefer a MS degree in related fields such as computer science or engineering and relevant industry experience. We will consider applicants with a relevant Bachelor's degree and significant industry experience for these positions. Our account/ sales manager, engineer and business development officer positions involve developing and managing business development initiatives, as well as existing accounts for the company. Qualified applicants will have a technical and/or business/marketing degree (MS preferred) and relevant industry experience. We will consider candidates with a relevant Bachelor's degree and/or relevant sales/BDM experience. Positions may require relocation to various client sites throughout the United States. Qualified applicants submit resumes to HR Department (Attn: Mithilesh Sharma), Patni Americas, Inc., One Broadway, 15th Floor, Cambridge, MA 02142.

Computer Professionals for (Altamonte Springs) FL based IT firm,Sr. Level Position: Sr. S/w Eng, Sr. Programmer Analyst to convert project specifications & statements of problems & procedures to detailed logical flow charts for coding into computer language. Develop & write computer programs to store locate & retrieve specific documents, data & information. Apply with 2 copies of resume to H.R.D, Agitech Solutions, Inc., 283 Cranes Roost Blvd, Suite 111, Altamonte Springs, FL, 32701.

Database Administrator
Synerzy Software Solutions Inc (Iselin, NJ) seeks Database Administrators to develop, modify, test, & maintain database management systems utilizing specialized knowledge in SSO Management tools, Sun Directory Server, Sun Application Server, IIS, Apache, WebSphere, WebLogic, HTML, Shell, Perl, C, C++, Red Hat Linux, Windows. Plan, schedule, install and test new databases and programs.
Kindly forward the resume to mailto:dsp@synerzy.com or naveed@synerzy.com (HRD)
Synergy Software Solutions, Inc., 1 Austin Ave., Iselin, NJ 08830.
Contact – 732-414-2021 / 2023

Network Managers in Piscataway, NJ area. Supervise/Mentor Jr. engineers to Implement/troubleshoot Routing, Switching & IP Telephony solutions involving UCM, UCME, UC, UCE, IPCCX, VOIP Gateway/ Gatekeepers and SBC for enterprise networks. Administer Linux, Windows NT/00/03 domain w/ Exchange. BS/equiv in Comp Sci, Eng or rel. w/5+ yrs rel. exp. CCIE Voice, CCNP, & CCVP preferred. Travel/reloc as reqd. Send res. to: Subex Technologies, Inc. 255 Old New Brunswick Rd. Ste S240, Piscataway, NJ 08854

IT Consultant & Project Manager needed at unanticipated sites w/ exp using C, C++, CORBA, Informix, & Unix or .Net Framework. Mail resume to: Collabera, Attn: Hireme, 25 Airport Rd, Morristown, NJ 07960

Looking for a challenging IT Career, shouldn't be such a challenge.

Find your ideal job at www.ITCareers.com.

IT|careers

QA Project Manager needed w/ exp using Test Director, Load Runner, PerfMon, NetMon, Oracle, JAVA, HTML, XML & VB. Mail resume to: BenchmarkQA, Attn: D. Dreblow, 7301 Ohms Ln #590, Minneapolis, MN 55439.

Intec Telecom Systems PLC, Atlanta, GA, positions are available:
Senior Technical Consultant–GA2066
Submit resume to Attn: Kristy Williams, Intec Telecom Systems PLC, 301 Perimeter Center North, Suite 200, Atlanta, GA, 30346 U.S.A. referencing appropriate job title and requisition number.

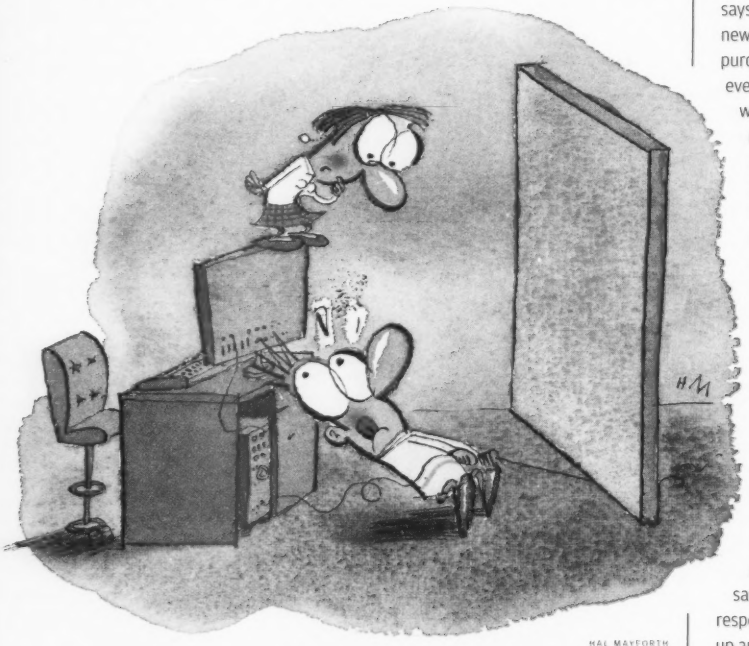
HP Enterprise Services, LLC is accepting resumes for the following positions: Technology Consultant in Palo Alto, CA. (Ref. #RESPALTC11). Provide technology consulting to customers and internal project teams. Provide technical support and/or leadership in creation and delivery of technology solutions designed to meet customers' business needs and, consequently, for understanding customers' businesses. Extensive travel required to various unanticipated locations throughout the US. Services Information Developer in Mountain View, CA (Ref. # ESMVSID11). Conceptualize, design, develop, unit-test, configure, and implement portions of new or enhanced (upgrades or conversions) business and technical software solutions through application of appropriate standard software development life cycle methodologies and processes. Mail resume to HP Enterprise Services, LLC, 5400 Legacy Drive, MS H1-6E-28, Plano, TX 75024. Resume must include Ref. #, full name, email address & mailing address. No phone calls please. Must be legally authorized to work in the U.S. without sponsorship. EOE.

PINNACLE SOLUTIONS WORLD WIDE is looking for a Project Manager with >2 year experience in Waterfall, Agile-Scrum, RUP, QA, Business Analysis, Testing, MS Visio 2003, MS Project 2003, Actuate 8 & 9, Oracle, and SQL, for New York and Pennsylvania. Master's degree in Comp Sci., Comp App., Eng'g., Bus. Admin., Math, or Info. Sys. + minimum 2yrs exp. req. In lieu of Master's degree will accept Bachelor's + 7 years of experience in job. Please e-mail your resume to: jobs@pinnaclesolutionsworldwide.com referencing Job Code: PrintAdCW

Hewlett-Packard Company is accepting resumes for an Electrical/Hardware Engineer in San Diego, CA. (Ref. #SDEHW31). Design, develop, modify and evaluate electronic parts, components or integrated circuitry for electronic equipment. Mail resume to Hewlett-Packard Company,5400 Legacy Drive, MS H1-6E-28, Plano, TX 75024. Resume must include Ref. #SDEHW31, full name, email address & mailing address. No phone calls please. Must be legally authorized to work in the U.S. without sponsorship. EOE.

SHARK TANK

TRUE TALES OF IT LIFE AS TOLD TO SHARKY



HAL MAYFORTH

Walls — and *Only* Walls

Pilot fish gets a call from a user whose desk was moved. She says she can't get to her network files or the Internet. "I checked everything — network card light was on, network speed was set correctly, user had correct domain and log-in credentials," says fish. "I then looked to see where the network cable was plugged in and followed it from the computer to . . . the bottom of the wall! Seems the wall was installed the night before. The wall guys simply moved the user's desk to its new location without unplugging anything, and then they installed a new wall — right over the network cable. I installed a temporary cable that snaked around the floor from the computer through the doorway and over to the network jack. Then I put in an order for a network jack to be installed outside the wall and close to the desk. Takeaway lesson: Beware the wall guys. They don't do cables; they *only* install walls!"

One Little Problem

Budget slashing and radical new money-saving ideas are the order of the day at this school district. Fortunately, the new head of IT has a brainstorm. "Everyone in the IT department carried a Nextel phone that could also work as a two-way radio," says a pilot fish on the scene. "The new IT boss took the Nextels and purchased Apple iPod Touches for everyone, including herself. She said we could use Skype to communicate. It didn't work. Now we could listen to music and surf the Internet via wireless in the school buildings. We just couldn't contact each other unless we used our personal cell phones."

How Hard Could It Be?

This rural school district is so cash-strapped that the board decides to cut the job of the IT director, reports a pilot fish in the know. "The district had in recent years rolled out new computers to its high school, middle school and some elementary schools," says fish. "The then-IT director was responsible for keeping everything up and running." When that position was eliminated, the downsized IT director was rehired as the high school librarian. "Then the stuff began to hit the fan," fish reports. "With no single person really in charge of IT, everyone did their own thing, and the local techies providing support at each school became overwhelmed." But when funding was restored for the IT director's position, the school system decided not to rehire the librarian as the head of IT. Why? The mess that arose in the absence of an IT chief was blamed on the former director — for failing to set up a system that could run by itself.

» Shark Tank can't run by itself. Send your true tale of IT life to sharky@computerworld.com. You'll score a sharp Shark shirt if I use it.

CHECK OUT Sharky's blog, browse the Sharkives and sign up for home delivery at **computerworld.com/sharky**.

ADVERTISERS' INDEX

This index is provided as an additional service. The publisher does not assume any liability for errors or omissions.

1&1 Internet 16-17
1and1.com
Citrix Systems, Inc. C2-1
citrix.com/simplicityispower
CSO Executive Seminar 25
events.csoonline.com/csad
Dynamics, Inc. 29
poweredcards.com
dtSearch 35
dtsearch.com
Hewlett-Packard C1, 15
hp.com/servers/unleash5
IBM Non-Intel 3
ibm.com/exchange
IBM Non-Intel 5
ibm.com/hospital
IBM Non-Intel 21
ibm.com/luggage
IT Roadmap Conference & Expo C3
itroadmap.net/nycad
Microsoft C4
microsoft.com/cloud/azure
Siemens IT Solutions and Services, Inc. 9
usa.siemens.com/it-solutions
Sprint 7
sprint.com/convergence
SunGard 13
sungardas.com/cloud11

BPA WORLDWIDE AUDITED

Periodical postage paid at Framingham, Mass., and other mailing offices. Posted under Canadian International Publication agreement PM40063731. **CANADIAN POSTMASTER:** Please return undeliverable copy to PO Box 1632, Windsor, Ontario N9A 7C9. Computerworld (ISSN 0010-4841) is published twice monthly by Computerworld Inc., 492 Old Connecticut Path, Box 9171, Framingham, Mass. 01701-9171.

Copyright 2011 by Computerworld Inc. All rights reserved. Computerworld can be purchased on microfilm and microfiche through University Microfilms Inc., 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Computerworld is indexed. Back issues, if available, may be purchased from the circulation department. Photocopy rights: permission to photocopy for internal or personal use is granted by Computerworld Inc. for libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of $3 per copy of the article, plus 50 cents per page, is paid directly to Copyright Clearance Center, 27 Congress St., Salem, Mass. 01970. Reprints (minimum 100 copies) and permission to reprint may be purchased from Ray Trynovich, Computerworld Reprints, c/o The YGS Group, Greenfield Corporate Center, 1808 Colonial Village Lane, Lancaster, Pa., 17601, (800) 290-5460, Ext. 148. Fax: (717) 399-8900. Web site: www.reprintbuyer.com. E-mail: computerworld@theygsgroup.com. Requests for missing issues will be honored only if received within 60 days of issue date. Subscription rates: $5 per copy. Annual subscription rates: — $129; Canada — $129; Central & So. America — $250; Europe — $295; all other countries — $295; digital subscription — $29. Subscriptions call toll-free (888) 559-7327. **POSTMASTER:** Send Form 3579 (Change of Address) to Computerworld, PO Box 3500, Northbrook, Ill. 60065-3500.

COMPUTERWORLD

HEADQUARTERS
P.O. Box 9171
492 Old Connecticut Path
Framingham, MA 01701-9171
(508) 879-0700
Fax (508) 875-4394

President/CEO
Michael Friedenberg
(508) 935-4310

Executive Assistant to the President/CEO
Pamela Carlson
(508) 935-4274

Senior Vice President/ Group Publisher
Bob Melk
(415) 975-2685

Vice President/Marketing
Sue Yanovitch
(508) 935-4448

Senior Vice President/ Chief Content Officer
John Gallant
(508) 766-5426

Senior Vice President/ Human Resources
Patty Chisholm
(508) 935-4734

Senior Vice President/Events
Ellen Daly
(508) 935-4273

Senior Vice President/ General Manager, Online Operations
Gregg Pinsky
(508) 271-8013

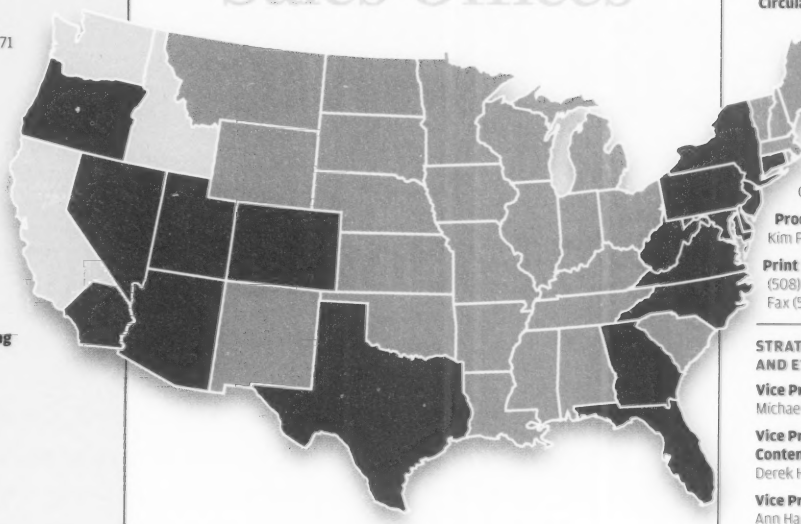
Senior Vice President/COO Enterprise Services Group
Matthew C. Smith
(508) 820-8102

International Data Group Chairman of the Board
Patrick J. McGovern

CEO, IDG Communications
Bob Carrigan

Computerworld is a business unit of IDG, the world's leading technology media, research and events company. IDG publishes more than 300 magazines and newspapers and offers online users the largest network of technology-specific sites around the world through IDG.net (www.idg.net), which comprises more than 330 targeted Web sites in 80 countries. IDG is also a leading producer of 168 computer-related events worldwide, and IDG's research company, IDC, provides global market intelligence and advice through 51 offices in 43 countries. Company information is available at www.idg.com.

Sales Offices



Vice President/Publisher John Amato
john_amato@computerworld.com (508) 820-8279

NORTHWESTERN STATES AND NORTHERN CALIFORNIA

Account Director, Integrated Sales
Neil Dhanowa (415) 978-3305

Sales Associate
Nida Thongnopneua (415) 978-3312

Mailing Address
501 Second Street, Suite 114,
San Francisco, CA 94107
Fax (415) 543-8010

NEW ENGLAND, SOUTHERN AND CENTRAL STATES

Account Director, Integrated Sales
Jeff Gallagher (508) 820-8133

Senior Sales Associate
Jess Román-Salcedo (508) 271-7108

Mailing Address
P.O. Box 9171, 492 Old Connecticut Path, Framingham, MA 01701
Fax (508) 270-3882

WESTERN AND SOUTHWESTERN STATES

Account Director, Integrated Sales
Sarah Lipton (415) 978-3306

Sales Associate
Eran Butts (415) 978-3311

Mailing Address
501 Second Street, Suite 114,
San Francisco, CA 94107
Fax (415) 543-8010

EASTERN AND SOUTHEASTERN STATES

Account Director, Integrated Sales
Hal Mentlik (631) 696-4498

Sales Associate
Jess Román-Salcedo (508) 271-7108

Mailing Address
P.O. Box 9171, 492 Old Connecticut Path, Framingham, MA 01701
Fax (508) 270-3882

Get more IT peer perspective online:

LINKEDIN GROUP:	FACEBOOK:	TWITTER:
computerworld.com/linkedin	facebook.com/Computerworld	twitter.com/Computerworld

CIRCULATION/DISTRIBUTION

Vice President
Debbie Winders (508) 820-8193

Circulation Manager
Diana Turco (508) 820-8167

Circulation Coordinator
Mary Kittredge
(508) 820-8670

PRODUCTION

Vice President, Manufacturing
Chris Cuoco

Production Manager
Kim Pennett

Print Display Advertising
(508) 988-6909
Fax (508) 879-0446

STRATEGIC PROGRAMS AND EVENTS

Vice President, Marketing
Michael Garity (508) 766-5457

Vice President, Content Development
Derek Hulitzky (508) 620-7705

Vice President, SNW
Ann Harris (508) 820-8667

National Director of Event Sales
John Tatusko (508) 620-7758

Event Sales Manager
Ginger Boermeester (508) 820-8518

Event Sales Manager
Laurie Tallent (508) 820-8208

ONLINE ADVERTISING

Vice President/ Publisher, Online
Brian Glynn (508) 935-4586
Fax (508) 270-3882

Online Sales Director
Jennell Hicks (415) 978-3309
Fax (415) 543-8010

Account Services Director
Danielle Thorne (508) 988-7969
Fax (508) 270-3882

Online Sales Assistant
Joan Olson (508) 270-7112
Fax (508) 270-3882

IT CAREERS

Publisher
John Amato (508) 820-8279
Fax (508) 270-3882

Regional Account Manager
Enku Gubaie (508) 820-5487

LIST RENTAL

Postal and E-mail
Rich Green (508) 370-0832
rgreen@idglist.com

Mailing Address
IDG List Services, P.O. Box 9151
Framingham, MA 01701-9151
Fax (508) 370-0020

SUBSCRIPTIONS

Customer Service
(888) 559-7327, toll free
Local or outside U.S.
(847) 559-1573
cw@omeda.com

OPINION

SCOT FINNIE

In 2011, Clouds Rolling In

Cloud computing may be the topic we love to hate, but it's also serious business for a great many IT organizations this year.

WHERE DO YOU STAND on cloud computing? Where does your company stand? If you think it's all hype, you might be surprised to learn that many of your colleagues are giving it a serious look. Gartner's August 2010 "Hype Cycle" report puts cloud computing just over the "peak of inflated expectations," heading for the "trough of disillusionment." Maybe that's right, once you tack on the four to five months since Gartner published. I think most IT professionals would agree that cloud has received more than its fair share of, let's say, attention.

The irony is that even while many people are sick of hearing about cloud, this isn't a one-way, vendor-driven conversation. In fact, a few big-name vendors took early stands against cloud but now, in reaction to user demand, are busily launching cloud offerings. In many cases, the C-suite is leading the internal conversation about the cloud, so there's impetus behind it. Many organizations are actively planning or implementing cloud initiatives this year.

Computerworld's November 2010 Cloud Computing Survey confirms that. It was surprising to me, for example, that nearly one-third of the respondents said they expect their companies to fully convert their IT operations to private clouds this year.

On average, 16% of respondents' 2010 budgets were allocated to cloud-based initiatives. Fifty-five percent said they expect 2011 cloud allocations to rise, while only 1% projected that they will fall. Respondents from large enterprises said they expect to spend an average of $2 million on cloud this year. Some 35% named infrastructure as a service as a key focus of their cloud investments, with storage as a service and SaaS ranking higher, at 43% and 48%, respectively.

Sorry to spew statistics at you, but they clearly illustrate my point: Cloud computing may be the topic we love to hate, but it's also serious business for a great many IT organizations this year.

Lack of personnel is another potential spur to cloud adoption. By offloading management, support and other time-consuming chores to third parties, senior IT leaders may hope to reallocate personnel to more strategically important efforts. That suggests that they don't expect head counts to return to 2008 levels anytime soon. In other words, a lot of the interest in cloud computing may stem from its potential to boost staff productivity.

The promise of cost savings seems to be another draw, but everything I've heard suggests that the savings might be overstated, especially early on.

Interest in cloud is rising in the face of hype fatigue and suspicion about rosy promises. The trend is also bucking serious user reservations about things like security, data replication/duplication and data silos, which were the three biggest concerns mentioned by respondents to the *Computerworld* cloud survey. Plunging in when caution is advisable is a pretty rare phenomenon in the world of IT. We're wisely risk-averse.

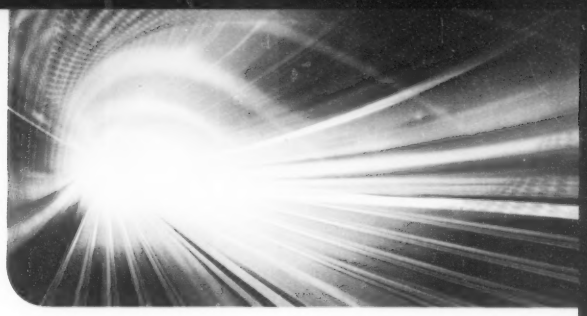
Could cloud computing be a rare exception to the Gartner "Hype Cycle" trend line, transitioning directly from hype to useful? I wouldn't expect that from a service technology that's been as overexposed as this one. Perhaps, though, cloud's less-than-fresh aspects are at play here. There have been several attempts over the years to introduce cloudlike services under other names: managed services, hosted apps, utility computing and so forth. Maybe we just needed a little surplus server capacity and a deep recession to make it catch on.

I'm a bit surprised that a cloud-building boom seems to be in the cards this year. Combine that with server, storage and network virtualization, and we'll see data centers remake themselves before our eyes. It's happening very quickly. ◆

Scot Finnie is *Computerworld*'s editor in chief. You can contact him at sfinnie@computerworld.com and follow him on Twitter (@ScotFinnie).

IT Roadmap
CONFERENCE & EXPO

An IDG Enterprise Event



New York City
February 8, 2011
8:15am – 4:30pm
Javits Convention Center

Register today!
www.itroadmap.net/nycad

At **IT Roadmap Conference & Expo**, you'll discover everything you need to know to make informed technology decisions for the year ahead – in just one day. And we're coming to New York!

Through ROI workshops, technical tutorials, strategy sessions, roundtable discussions, keynote addresses, networking opportunities and an interactive expo floor, you'll hear fresh perspectives and new technology insights from the industry's leading IT analysts, top tech practitioners, and experienced, high-profile end users.

All new morning tracks include:

- **The New Data Center**
- **The Connected Enterprise**
- **The Modern Network**
- **The Public & Private Cloud**
- **The Evolving Threat Landscape**

Who Attends:

- **CIOs & VPs**
- **Directors of IT**
- **IT Managers**
- **Architects & Engineers**

IT ROADMAP 2011

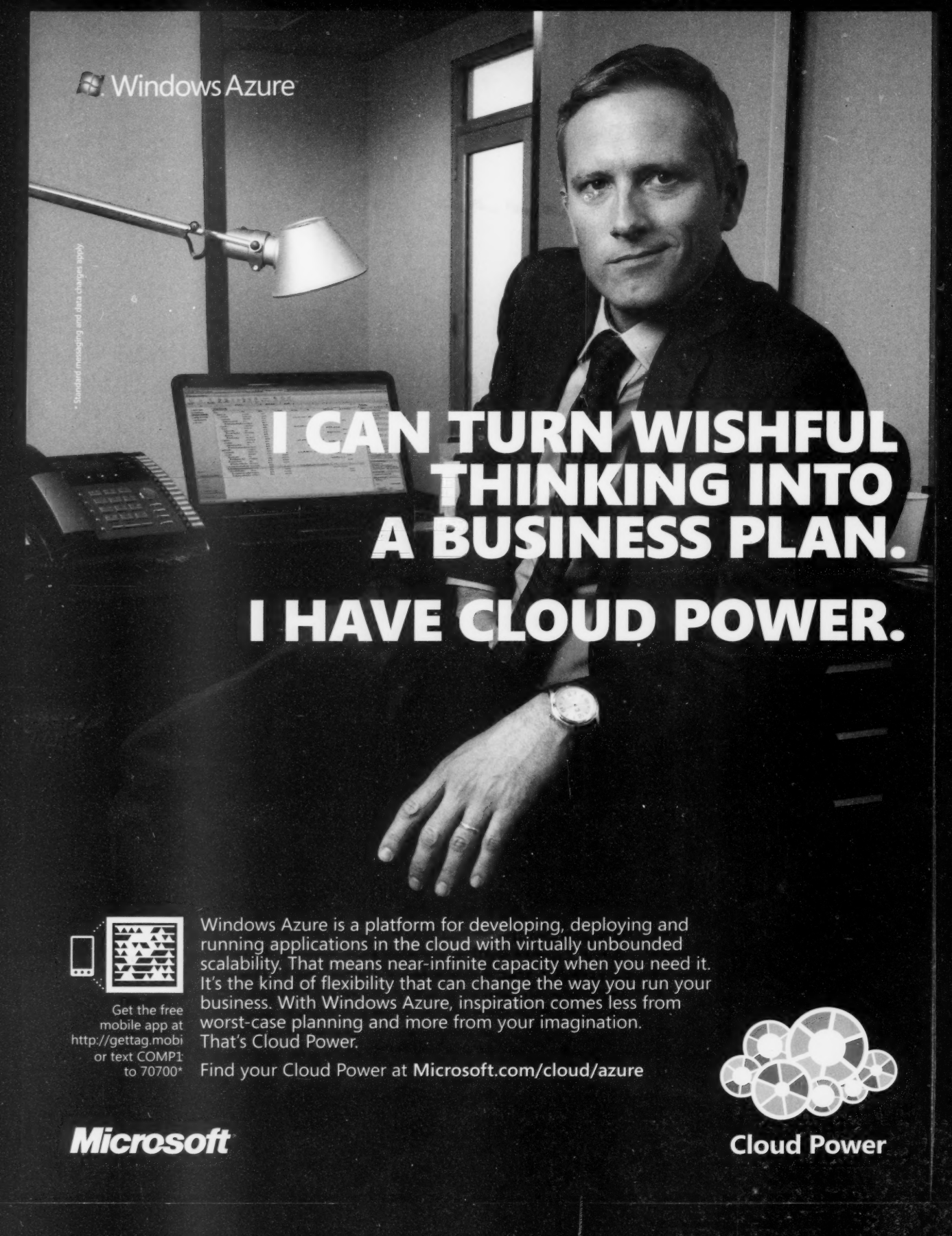
New York City	February 8
Chicago	March 15
Denver	April 28
Boston	June 7
Dallas	September 13
San Francisco	October
Washington, DC	November

To learn more, visit:
www.itroadmap.net/nycad

For more information about sponsorship opportunities and benefits
Contact Andrea D'Amato, Vice President and Publisher of Network World, at adamato@nww.com or 508-766-5455.

PRODUCED BY

CIO COMPUTERWORLD CSO InfoWorld IT WORLD NETWORKWORLD


Windows Azure
*Standard messaging and data charges apply.
I CAN TURN WISHFUL THINKING INTO A BUSINESS PLAN.
I HAVE CLOUD POWER.
Windows Azure is a platform for developing, deploying and running applications in the cloud with virtually unbounded scalability. That means near-infinite capacity when you need it. It's the kind of flexibility that can change the way you run your business. With Windows Azure, inspiration comes less from worst-case planning and more from your imagination. That's Cloud Power.
Get the free mobile app at http://gettag.mobi or text COMP1 to 70700*
Find your Cloud Power at Microsoft.com/cloud/azure
Microsoft
Cloud Power